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**DEVELOPMENT AND APPLICATION OF CRITERIA  
FOR OPTIMIZATION OF THE TEXAS AIRPORT SYSTEM**

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## **IMPLEMENTATION STATEMENT**

The research documented in this summary report provides information to the Texas Department of Transportation on the state of the current airport system and its importance to the State of Texas and the nation. This information will allow the Department to make more informed decisions regarding the airport system with respect to future projects. In addition, it will help to evaluate how well the current airport system is meeting the needs of the state and the objectives of the Department.

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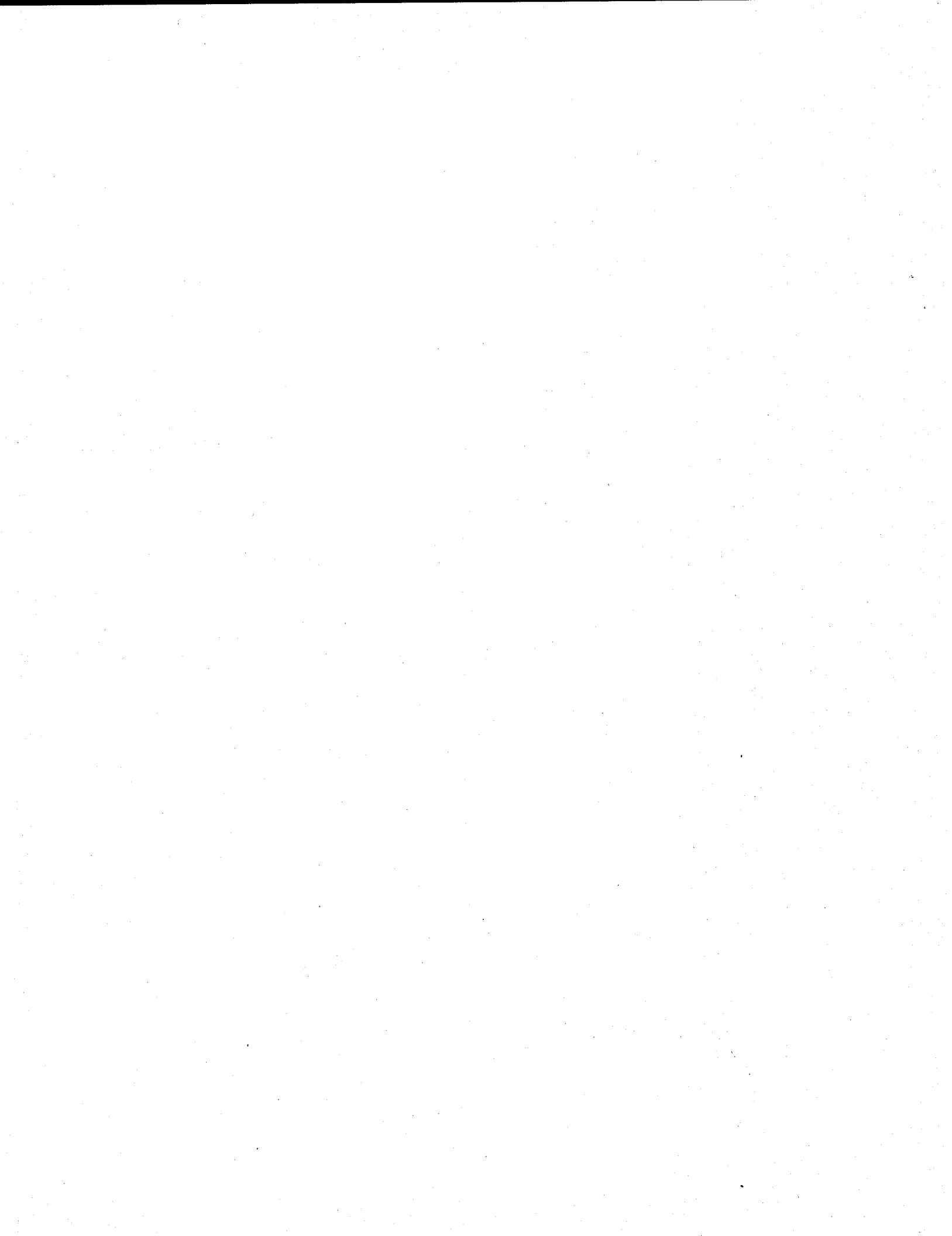
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## SUMMARY

General aviation includes all the flying that is not conducted by the airlines or the military. While less visible than the commercial air carriers, it is no less important. The literature shows that the general aviation airport concept is not well understood simply because it is not marketed as widely as other products or services. General aviation airports are often overlooked and taken for granted despite playing vital roles in many communities.

Funding continues to be a problem as there simply is not enough money to operate and maintain these airports. Airport managers are very concerned and some have turned to innovative financing methods. Consequently, these managers have become more attuned to public relations to develop support for their airports.

Access to rural communities is of particular concern. Small rural communities are often more dependent on these aviation facilities than other communities. They are essential in attracting and maintaining businesses so the community can remain competitive. They are also critical to certain industries such as agriculture that have special needs and contribute greatly to the economy. Agriculture is big business in Texas and other states and this industry relies on these facilities to operate.

Interviews with several state aviation offices revealed that none have taken steps to optimize their state airport systems. While several states have completed, or are in the process of undertaking, classification studies, none have sought to define an "ideal" airport system. Not all of the states interviewed are having difficulty funding their needs but there does appear to be a consensus that it is becoming more difficult. It is expected that these functional classification studies will help states to prioritize airports and specific projects for funding. However, they will not define an optimal or "ideal" system.

In the final analysis, it is clear that the current airport system provides adequate airport access to the people of the state. Approximately 98% of the state's population is located within a 25-mile driving radius of an aviation facility. More than 90% of the state's property tax, retail sales, employment, oil and gas, and agricultural activity occurs within a 25-mile radius of an airport.



## CHAPTER 1. INTRODUCTION

### BACKGROUND AND SIGNIFICANCE OF THIS REPORT

The Texas general aviation airport system developed over time in a relatively unstructured manner. Many system airports were developed as either private strips or surplus military facilities with ownership being transferred to communities that now operate the airports for public use. Therefore, the current airport system may not be the optimum to meet the state's needs.

The airport system is also costly to maintain. The current Texas Airport System Plan (TASP) produced by the Texas Department of Transportation's (TxDOT) Aviation Division projects 0-5 year development costs for general aviation non-reliever facilities at more than \$293 million or \$58.7 million per year. Reliever airport development costs are projected at almost \$301 million or approximately \$60 million per year (1).

Federal funding for state aviation provided to general aviation reliever and non-reliever airports is approximately \$23.0 million. State funding is about \$15 million annually. The annual total amount available for general aviation airports is about \$38 million from all sources. The total amount needed, however, is \$118.7 million, resulting in a shortfall of \$81 million each year.

With the limited resources available, it is understandable that the perception exists that there are too many airports in the Texas airport system. However, where to trim the system is open to debate and depends on the person offering the opinion. In recent telephone interviews conducted with airport managers and city officials at some of the state's general aviation airports, the consensus was virtually unanimous, "Without an Airport, You're Dead" (2). None of the cities or counties that sponsor airports expressed any interest in having their airports deleted from the Texas Airport System Plan. The airport is a vital link in these communities for industry, banking, agriculture, and medical services and improves the standard of living. Table 1 lists the number of airports in the system and their role.

**TABLE 1**  
**TASP System Airports by Role and Number**

Airport Role	Number of Airports
Commercial Service	27
Reliever	24
Transport	66
General Utility	127
Basic Utility	63
<b>TOTAL</b>	<b>307</b>

Texas communities recognize the importance of air service to their economic development. However, the airport's viability depends upon the airport condition. Airports are not an asset if they are unusable because the runways have deteriorated. Deteriorating runways are among the largest consumers of available airport funding. Can the state afford to continue putting resources into all the general aviation airports requiring pavement maintenance? The recently completed *Update: Implementation of the Micro PAVER Pavement Management System on TxDOT Aviation Division Airfields* (3) indicates that runway improvements account for almost 67% of the five-year development cost projections for general aviation. More than 25% of the runways at general aviation airports are in fair or poor condition. These surfaces will require improvement within two to three years to maintain their present condition. Table 2 lists the pavement condition for general aviation airports in Texas.

**TABLE 2**  
**Pavement Condition Index (PCI) for Texas General Aviation Airports**  
**Frequency Report**

Condition	PCI Range	Percent of Total Pavement Area	
		January 1994	July 1996
Failed	0-10	6.01	3.71
Very Poor	11-25	7.62	8.00
Poor	26-40	5.19	9.87
Fair	41-55	6.93	10.32
Good	56-70	25.48	24.23
Very Good	71-85	22.52	30.91
Excellent	86-100	26.26	12.96

Note: Runways with a pavement condition index (PCI) rating of 55 or less are considered to be in need of improvement within two to three years.

Source: TTI

In developing the TASP, one of the most important objectives is to formulate a state system that will provide air access to small communities in the state to encourage economic development. Some businesses will not consider locating in communities without scheduled air service. A community without any air service is severely disadvantaged in terms of economic development potential. Therefore, the negative consequences to general aviation in not meeting the projected development needs are twofold. First, general aviation airports may be lost resulting in the community's loss of air access, business, and recreation. Second, the

community may lose the economic development potential that is provided by having air access.

From a policy perspective, TxDOT has a responsibility to use agency resources to support airport projects of state interest and not to fund projects that may have limited or few public benefits. Under the TASB, as currently structured, almost all of the publicly owned airports are eligible for state financial support.

This project will define an “ideal” system of general aviation airports that will meet the future air transportation needs of the state. Beginning with a “clean slate” so to speak, the ideal airport system will be identified using methodology similar to that used to develop the initial version of the Texas Trunk System as well as other criteria. This project examines the question of airport system plan optimization, or rationalization, in a comprehensive context to include factors such as public policy considerations, air transportation as a mode, community economic vitality and competitiveness, and traditional airport system planning criteria. Other factors include the forecast growth of general aviation, impacts of changes in speed limits and driving times, the functionality of each airport identified for inclusion in the ideal system, and access criteria.



## CHAPTER 2. LITERATURE REVIEW

### GENERAL AVIATION AIRPORTS

While the commercial air carriers remain the most visible segment of the air transportation system, the majority of aircraft operations occur within the general aviation segment. General aviation is generally considered to include all flying not conducted by commercial airlines. This includes business flying, instructional flying, and personal flying. This activity occurs at the smaller, general aviation airports that comprise 80% of the airports in the National Plan of Integrated Airport Systems (NPIAS) and more than 90% of the airports in the Texas Aeronautical Facilities Plan (T AFP) (4). These facilities provide air access to many population centers across the state. They include both industrial and agricultural uses and they contribute to both natural resource and economic development. It is clear that general aviation is an economic force both in Texas and nationally.

Although general aviation contributes greatly to local, state, and national economies, it is widely accepted that this contribution is not well understood outside of the aviation community (5, 6). The reasons are varied and include the fact that airports are not often marketed as widely as other products and services. Rarely are general aviation airports perceived as the economic engines that they are for many communities. As funding levels decline and uncertainties cloud the future, the issues of management and possible loss of a general aviation airport will rise to the forefront in many communities.

Airports play vital roles in communities, roles that are often taken for granted. They also are important for several industries including agriculture, mining, fishing, and oil exploration and production (6). These airports are often used to bring entertainment to the community during airshows and provide a gateway to a community's recreational facilities. However, they also offer options for medical care. Not only do they provide access for medical evacuation services, but also they provide a facility for delivering medical or emergency supplies as well as evacuation services during natural disasters. Most importantly, general aviation airports provide access to a community for business.

General aviation airport users are not recreational flyers or wealthy individuals enjoying an expensive hobby. The activity at the airport is often associated with business. A survey in Massachusetts showed that 35% of the businesses using general aviation are service businesses, a category that includes consultants, lawyers, doctors, and advertising firms (5). "Manufacturing contributed another 19% of all business users and was dominated by computer, electronics, and machinery manufacturers. An additional 32% of the survey respondents were engaged in diverse industries such as wholesaling, retailing, construction, utilities, agriculture, and fishing" (5).

Corporate access to general aviation airports is of growing importance to both the business community and the community. As businesses decentralize their operations, it is critical for communities to offer these facilities if they are serious about competing for, and attracting businesses to their area. Without these facilities, cities and towns are jeopardizing their opportunities to grow and economically sustain themselves.

The Massachusetts survey pointed out that general aviation facilities are very important to businesses when they make location decisions. "Any airport that increases the types of aircraft that can use the airport, or the time that the airport can be used, or the reliability for its usage, will encourage greater use of the airport and, hence, attract additional businesses and promote economic growth" (5).

General aviation airports play a critical role in larger urban areas serving as centers of economic growth and as reliever facilities for larger air carrier airports. This provides greater capacity for the air carriers. For the most part, their relationship to larger airports in terms of their roles and their economic significance is understood and appreciated. It is their impact in smaller communities that is less understood. "The public and legislators do not fully appreciate how a small airport in a rural area can contribute to the economic development of that region. While the airport itself is quite visible, the complexity and interaction of the air transport system is much less apparent" (6).

Further, the condition of the airport is paramount to the economic activity that follows. This not only includes the condition of the pavement but also the level of service offered on the field. Without a doubt, the success of the airport and the subsequent economic activity will hinge on the condition of the airport. While it is important to develop such a facility, it is equally important to maintain the facility.

Developing and maintaining these facilities is expensive as noted above. Money continues to be a driving consideration for general aviation airports. There simply is not enough money to fund adequate maintenance. Airport managers across the country are increasingly concerned as funding diminishes. Many who operate reliever airports worry about the reductions as more airports achieve reliever status and still share from the same pot of money. This essentially reduces the amount they would receive. Others are concerned about environmental issues and their associated costs. It is becoming increasingly difficult for managers to balance the needs and requirements of private industry to attract commerce while complying with, and operating under, the regulations and guidelines established by the various levels of governments.

One airport manager underscored the need to educate the public and the government on the importance of reliever airports and the role and function they serve in our communities as well as the economic impact they have. These relievers, if not adequate, can have negative effects on the air transportation system as a whole. As one manager pointed out, "if our federal leaders allow the functional effectiveness of the reliever system to decline, it will have deleterious effects on the air carrier facilities to operate efficiently and safely" (7). It is possible that when the problems are evident in the most visible segment of the air transportation system, the proper attention will be given these issues on a national level.

The persistent funding issues have motivated many to become creative in finding new revenue sources for their airports. Airport managers have become more in-tune with public relations and creating positive experiences and interactions with their communities and their tenants. Some airports have begun mailing newsletters while others have planned air shows to attract the public and introduce them to the airport.

These public relations efforts across the country have also shown the community what opportunities the airport can provide. They have been successful in attracting both aviation and non-aviation businesses to airports (7).

However, airport managers' wish lists really indicate what is needed to make the facility successful. The list includes runway expansions, T-Hangar construction, development of industrial parks, terminal building modernization, installation of modern navaids and land, and airport rescue and firefighting equipment acquisitions (8).

In addition to the public investment, airports need private investment. "Private money is what makes an airport successful and success is contagious" (8). However, private entities are often reluctant to participate until they are convinced of the airport's viability or stability in the region demonstrated by public support and resources. This catch-22 situation is summed up by Connin and Leggett. In their study on rural airport business travel, they conclude that "often the difference between a moribund rural airport and a prosperous one is the skill and talent of local officials, such as the airport manager, local business groups, and the clout of elected officeholders to deliver funding to their local airports" (9).

## RURAL AIRPORTS

While air access is important to communities of all sizes, it is particularly important to rural areas, because they do not have the diversity of goods and services available to them like larger urban areas. An airport is essential for these rural communities to attract and maintain businesses, but it often takes more. It only provides an opportunity or diminishes its competitiveness. A recent Texas Transportation Institute (TTI) study examined the rural air transportation system in Texas (10). The study showed that while rural airport funding has increased in the 1990s, it is still not adequate to meet the needs identified for the facilities. Challenging this funding situation even further is the fact that it costs approximately \$3 million to construct a suitable airport that can provide access for the turboprop or small jet aircraft used by businesses today. To upgrade an existing facility built for primarily single-engine aircraft is approximately \$1 to \$2 million.

The rural airports study examined the 153 airports in the Texas Airport System that fit the classification of rural airports. A rural airport is defined as any airport that serves a community of less than 10,000 located more than 25 miles from an urbanized area of 50,000 or more (10). The study sought to determine the attributes of an airport that contributed to its success. The success or vitality of an airport is a subjective measure. For the rural airport study, success was determined by estimating and weighting several factors. These include the sponsor's level of interest, aircraft activity levels, airport appearance, services available at the facility, and the physical condition of the airport pavement, its markings, and lighting.

Professional judgement was then used to incorporate these factors into a numerically weighted estimate measuring the success of a rural airport (10). The study concluded that four attributes were highly correlated with the success of rural airports in Texas. They are: 1) the number of registered aircraft in the county, 2) the role or design standard of the airport, 3) availability of services at the airport, and 4) whether or not the airport is attended (10).

Not all of these, however, are controlled by the airport sponsor. While a sponsor may impact arrangements for services to be provided at the airport, the number of based aircraft is

more a factor of economics and attractiveness in the airport's service area. Upgrading an airport from a basic utility airport to a general utility airport can make an airport more attractive. However, most rural airports do not have the resources necessary to upgrade their facilities without the assistance of TxDOT or some other source. It is simply cost prohibitive.

The study concludes that transport or general utility airports are more likely to be successful than basic utility airports. Further, since TxDOT does not have sufficient funding to upgrade many basic utility airports, the study supports a recommendation to upgrade airports whose sponsors have demonstrated a desire and intention to have the airport attended, to have additional services provided, and to have fuel available (10).

Other studies have confirmed these recommendations as well. A recent finding showed that the greatest benefits "might come from the improvement of many smaller, existing local airports that currently serve rural areas and might further growth of high-tech development in rural America" (11). This is a balancing act between the large capital costs involved in developing a new airport and the economic disadvantages of not having an adequate facility. Some industries appear to be more sensitive to the availability of an adequate airport in the community.

In their study of local airports and business development, Reeder and Wanek suggest that high-tech industries are sensitive to airport availability. "Recent industrial location studies show that high-tech industries rank airports among the most important location factors, and recent empirical studies have shown that these industries do in fact locate and grow fastest in rural and urban areas with good airports" (11). Companies use these airports for a variety of reasons that include transporting employees, clients, and valuable products. They also are used by other industries including recreation and agriculture.

## AGRICULTURAL AIRPORTS

Agricultural airports are an important part of general aviation and have special needs. Agriculture is big business in Texas where cash receipts in 1996 exceeded \$13 billion and farm real estate values topped \$71 billion, second in the nation behind California (12). Many businesses, individuals, and financial institutions are involved in agribusiness throughout the state including food and fiber production, processing, transporting, and marketing. According to the Texas Agricultural Extension Service, agriculture was responsible for approximately \$44 billion in economic activity in the state in 1996 and the estimated value of farm assets totaled \$80 billion (13). There is also significant potential for future growth in the agricultural industry in Texas. World demands will play a role in this growth and Texas' ability to capitalize on it is paramount. For many Texas counties, agriculture is the primary economic activity. The use of aerial application aircraft is critical to the success of many crops and some livestock programs, and consequently, to the counties and the state.

Reeder and Wanek conclude, "policymakers should not overlook the importance of upgrading the many smaller local airports that are struggling to maintain and encourage business development" (11). Once airports deteriorate, their impact on a community can be devastating leaving it without the economic activity it once knew and depriving it of an economic opportunity in the future. "With limited federal and state funding available, efforts

should be made to identify those areas that would benefit most from airport improvements, and those places that have the greatest need for fiscal assistance" (11).

The short-term forecast for business aviation is expected to be good. Fueled by economic vitality, new products, and pent-up demand, business aircraft manufacturers and operators are riding a wave of prosperity that, barring any unforeseen economic disasters, will continue unabated for the next 3-5 years (14). This is good news for the general aviation airports that are trying to attract businesses to their facilities, as well as those that are trying to keep their current businesses. The global outlook is positive as some Latin America and European countries are expanding or replacing their fleets, 18% and 22% respectively.

In the U.S., general aircraft demand is expected to be robust for both new and used aircraft. In fact, according to the Federal Aviation Administration (FAA), "the U.S. general aviation fleet, that includes piston- and turbine-powered airplanes and helicopters, is forecast to grow 0.8% annually in the next 10 years to 196,000 aircraft" (14). Further, the number of active general aviation pilots is also forecast to grow to 712,600 by the year 2008 with the number of recreational pilots expected to reach 117,700 (14).

## **TELEPHONE INTERVIEWS**

In an effort to determine and better understand the current issues facing state general aviation airport systems across the country, the research team contacted several state aviation offices. The states interviewed all have large general aviation airport systems that play a critical role in their state. They also have traditionally strong general aviation programs. Additionally, the research team interviewed staff members at the FAA, the Aircraft Owners and Pilots Association (AOPA), and the National Business Aviation Association (NBAA).

### **California**

The staff at the California Division of Aeronautics is currently finalizing the 1996 airport system plan. They have not established any specific criteria for adding or deleting airports to the system, but do have a functional classification system that was recently developed. The purpose of this functional classification system is threefold. First, it is used to identify how each airport functions and the services it provides. Second, it identifies airport classifications that appropriately describe the state aviation system. Third, it determines the role each airport plays in the system.

The state is currently faced with a backlog of airport projects that neither state nor federal resources can meet. The magnitude of this backlog has not been determined but may be in the system requirement element yet to be developed. There has also been a change in the role of some of the general aviation airports in the state with respect to the types of aircraft being served. This has not resulted in any problems, as some of these airports have lengthened runways to accommodate the change in aircraft mix.

### **Colorado**

The Colorado Division of Aeronautics currently has a request for qualifications out to develop an inventory and implementation plan. Colorado's last system plan was developed in approximately 1992. The state does not specifically have criteria to add or delete airports

from its system. The staff is seeking to develop a core system of airports followed by a secondary level and a tertiary level of airports in the system. The staff does not anticipate proposing any new airports nor do they believe the plan will recommend the closure of any airports. The staff has done very well in meeting the needs of the airports in their system and, until this past year, has always had the funds available to meet identified needs.

The division is beginning to realize the change in aircraft using the state's airports. They have not yet been forced to upgrade facilities to accommodate the larger aircraft being used. However, the regional FAA office has informed the staff that these types of deficiencies need to be addressed before embarking on other types of improvement projects. While not all of the identified deficiencies are a result of the change in aircraft mix, some of them are. Some of the reasons for the change in aircraft being used include tourism and technology. Newer aircraft are capable of flying longer distances and faster, and tourism has increased especially from neighboring Oklahoma and Texas.

### **Florida**

The Florida Aviation Office recently let a \$2.5 million contract to continue and update their Continuing Florida Aviation System Plan. This plan will be somewhat different than past plans. Instead of providing a snapshot of the system at a particular point in time, the new plan will provide information about the system at any point in time. The plan will also include criteria for adding and removing airports from the state system. First, the airport must be open to the public and eligible for both state and federal money. Second, it must maintain its fundability, meaning that it must secure the local funding match.

The state has not had difficulty in meeting the identified needs of the airport system, however it is becoming clear that this ability is changing. Some projects do not receive full funding such as major projects/renovations at large air carrier airports. Other projects that remained unfunded or that were uncompetitive can obtain funding through other state programs. Consequently, there has not been much difficulty in meeting needs.

The state also has what the staff calls an "unloved airport" program. Under this program, airports that have not received federal or state money in the past seven years are eligible to participate in the program. The state will provide 80% of the money and require the local entity to put of 20% of the funds or in-kind services to obtain federal matching funds. This allows the airport to maintain one runway.

The staff has recognized a shift toward more multi-engine and business-class aircraft. For the most part, they have been able to accommodate the funding requirements. This has predominantly occurred in the metropolitan areas. Airports have been upgraded and a new airport was constructed. The North County General Aviation Airport was built in the past five years in the northern part of Palm Beach County as a reliever for Palm Beach International Airport. It was built to shift recreational traffic from Palm Beach International that already has noise and land-use problems. General aviation is blossoming in Florida and some airports are beginning to limit touch-and-go activity while another has restricted landing weights to less than 12,500 pounds. This is particularly the case along the southeast coast of the state along a 30-mile stretch north of Miami.

## **Illinois**

The Illinois Division of Aeronautics has a 1997 version of their airport system plan. Their process does identify needs for additional airports in the state, but they are currently experiencing some over-capacity in the southern third of the state. This is primarily due to the airlines eliminating service and the advent of the highway system that makes the automobile a more attractive option. The state maintains that if there is interest and assistance, it will help maintain an airport. It has not reached a point where a municipality has been unable to afford maintenance costs. Consequently, no airports have been removed from their system.

The state is finding it difficult to meet the financial needs of the system. The state has increased its level of funding over the past five to eight years from approximately \$3-\$5 million to approximately \$10 million to help offset reductions in federal funding. However, the state does not have sufficient funding for justifiable projects. The backlog in the number of years to get projects completed depends on the area of the state. The factors are different in the Chicago and St. Louis metropolitan areas compared to the rest of the state. However, the backlog can be approximated at three years. About two years worth of projects are being completed in a five-year period.

A change in the types of aircraft being used at general aviation airports is more apparent in the metropolitan areas where users are moving away from busier air carrier airports. This type of second-tier reliever airport activity is being experienced in the metropolitan areas within a 50 to 70 mile radius. The non-metro areas are somewhat static and the situation is more dependent on the location and proximity of the airport to interstates and driving times to the larger population centers.

## **Minnesota**

The Minnesota Aeronautics Office is in the process of completing its system plan. It is expected that it will be finalized in September. The staff has set out general criteria for airports in the system stating that 90% of the state's population should be within 30 minutes of a paved and lighted airport. Currently the criteria have been met and there are no plans to add airports to the system. There will not be any airports deleted from the system in the current plan. There were two landing sites (grass strips) closed, however, because the small communities that they serve could no longer afford to keep them open.

The state has been able to meet the financial needs of the system up until now. Some projects have been delayed for a year or so due to environmental reasons and not funding problems. The office has not yet rejected a project, but it may take one to two years to get it completed. Funding has not been a large problem.

The state, like others, has seen a shift in the type of aircraft using general aviation facilities. The trend is toward business aircraft including the larger turbo-props and more sophisticated aircraft. The state has completed necessary upgrades that have included runway expansions and instrument landing systems. The aeronautics office has made an effort to keep small communities economically viable by meeting the needs of their airports.

## **Virginia**

The current Virginia plan is quite old having been completed approximately 10 years ago. An update is expected in the next year or so. The plan does provide some criteria for adding and removing airports from the system, but the criteria are not spelled out in a comprehensive manner for use in all situations. It employs professional judgement and is specific to a particular market area. No computer models are used but the process does include the role of the airport, its services, usefulness, airspace, and terrain. The coverage area of the state's population in proximity to an airport is not a criterion, but is a goal.

The state has not had much difficulty meeting its financial needs but does feel that it is getting tougher. The state's eligibility, like some others, is open to a greater variety of projects than the federal program but they tend to be smaller in size. Some local agencies have difficulty in meeting their part of the match. Considering that this match only takes 2% for some projects, there is no state assistance or intervention if local agencies are unable to meet the funding match.

The state has also seen an increase in the number of multi-engine, corporate-class equipment being used at the general aviation airports. At the same time, there has been no decrease of single-engine traffic. The aircraft mix has become more varied. It has become difficult to determine whether a sponsor's requests are based on this trend or on their desire for an improved facility. Most of the sponsor's requests are related to these trend changes and are based on demonstrated or forecast need. The state has not had any difficulty funding these upgrades. It has been relatively unconstrained.

## **Wisconsin**

The Wisconsin Bureau of Aeronautics began updating its system plan in 1994 and the update is an on-going effort. A portion of its current work includes a classification update and review as well as a reliever study. No airports have been added or removed from the system recently. There were three proposed airport sites deleted however, and the process was subjective. The state does have some large privately owned airports that are open to the public and used by corporations. To date, only one of these airports has achieved designated reliever status. This was accomplished in 1995 and the airport has not yet received state money.

The state is not able to meet the financial needs of its system airports. According to the staff, the state has always run a backlog. The state's funding has remained constant at approximately \$10 million per year. This money is raised through an airline property tax, general aviation fuel taxes, and aircraft registration fees. The federal and local money for airport projects is approximately \$20 million and \$7 million, respectively. For 1998, the current need is approximately \$47 million leaving \$10 million in unfunded needs.

The staff has also seen a shift in the types of aircraft used at the general aviation airports. There has been a shift towards more multi-engine and corporate aircraft. This shift has not rendered the airports obsolete because these facilities have been continually upgraded. This shift of aircraft mix has, in part, prompted the state to undertake the classification study.

### **Federal Aviation Administration (FAA)**

Staff at the FAA, National Planning Division expect future funding levels to remain similar to current levels. Because the current grant program ends at the end of the current fiscal year, it is expected that Congress will approve a one-year stopgap bill. The issues facing the program require significant discussion and analysis by all involved parties. Because appropriate time was not available, a comprehensive re-authorization bill is not expected at this time.

Funding levels for general aviation airports are expected to remain largely unchanged. Fiscal year expenditures for the entire program are expected to remain unchanged at approximately \$1.8 billion and general aviation airports may experience a slight funding increase.

There is also some discussion about freeing up funds that have typically gone to the 29 largest airports. If these larger airports are allowed to raise money at the facility, i.e., through increased passenger facility charges, they may be able to relinquish their claim to the federal funds. This would free up more money for the airports at the other end of the spectrum because the 29 largest airports in the country do not depend on the federal money as much as the other airports. There is an on-going debate with the state planning officials regarding the lack of focus on general aviation airports. The outlook does, however, appear to be more favorable for general aviation airports in the future.

Currently, there is no effort at the federal level to change the criteria for inclusion of general aviation airports in the National Plan of Integrated Airport Systems (NPIAS). The reliever airport program has been under fire for the past few years. The funding level for the program was cut from 10% to 5% and then completely eliminated as a set-aside. There are plans to tighten the criteria for relievers and the issue is currently under internal review by the FAA.

### **National Business Aviation Association (NBAA)**

The NBAA is a professional group representing the interests of nearly 5,000 companies that own and operate approximately 7,000 aircraft. The NBAA communicates the interests and business of the organization to the executive, legislative, and regulatory agencies at the federal, state, and local levels. The organization studies issues ranging from air traffic procedures and aviation weather to airspace access and equipment specifications. The organization also provides technical expertise and information on safety, noise, and other important regulations that affect business aviation supporting the daily flying activities of its corporate members.

The NBAA identified three issues that are critical to the success of general aviation airports. The first is funding. The FAA funding resources are simply not sufficient. The disproportionate amount air carrier airports receive leaves very little for other airports. The NBAA also recognizes that these air carriers are more capable of raising money than the smaller general aviation airports because of the passenger facility charge (PFC) program that is available to them. Allowing additional large air carrier airports to raise more of their own revenue at the facilities themselves is a positive step for airports that currently do not have this option. The second issue is local sponsorship. The NBAA believes there is a lack of

funding at the local level for airport projects. Yet, they understand that local sponsorship is very important if a community desires to operate a successful airport. Often, communities do not readily understand the benefits and impacts that the airport does have and, consequently, its support level suffers.

The third issue is the alternative use of airport land. Encroaching development on land surrounding airports continues to be problematic. These developed areas adjacent to airports become sensitive to the noise despite the fact that the airports existed prior to the development. Inadequate zoning is detrimental to the success of airports. The appropriate land use surrounding the airport is essential to the success of the airport.

The NBAA publishes an airport handbook to assist local communities in organizing to fight airport closings. The organization opposes closings and offers assistance to communities to help them organize and create successful airports. The organization is also aware of the shift in the aircraft mix of its industry members to larger aircraft. However, they do not believe that this shift has created the need for immediate safety upgrades.

The NBAA recommends that general aviation airports have at least 5,000 feet of runway and prefer longer runways. The organization believes the funding situation is improving and recognizes that some states operate their programs better than others operate their programs. The state of Illinois was specifically mentioned as a national leader with an excellent program.

## SUMMARY OF LITERATURE REVIEW

General aviation includes all the flying that is not conducted by the airlines or the military. While less visible than the commercial air carriers, it is no less important. The literature shows that the general aviation airport concept is not well understood because it is not marketed as widely as other products or services. These airports are often overlooked and taken for granted despite playing vital roles in many communities.

These airports are important in several industries including agriculture, mining, fishing, emergency services, and oil exploration. They also play a role in larger urban areas where they serve as economic hubs and relieve the larger air carrier airports of smaller traffic thus increasing capacity. These airports are used not only by recreational flyers and wealthy individuals, but also by all industries including large and small corporations, which often require adequate aviation facilities before making business location decisions.

Funding continues to be a problem as there simply is not enough money to operate and maintain these airports. Airport managers are very concerned and some have turned to innovative methods of financing. Consequently, these managers have become more public relations savvy to gain support for their airports.

Access to rural communities is of particular concern. Rural communities are often more dependent on small general aviation airports than other communities. They are essential to attract and maintain businesses to remain competitive. These airports are also critical to certain industries, i.e., agriculture, which have special needs but contribute greatly to the economy. Agriculture is big business in Texas and other states and this industry relies on the general aviation airports to operate.

The interviews of state aviation offices revealed that none have taken steps to optimize their state airport systems. While several states have completed or are in the process of undertaking classification studies, none have sought to define an ideal airport system. Not all of the states interviewed are having difficulty funding their needs but there does appear to be a consensus that it is becoming more difficult to secure funding. It is expected that these functional classification studies will help states prioritize airports and projects for funding, but these studies will not help them define an optimal or ideal system.



## CHAPTER 3. METHODOLOGY

The methodology used in this study to identify the ideal airport system is similar to that used to develop the initial version of the Texas Highway Trunk System. Criteria for selection to the system were developed and then applied to create the “ideal” airport system. This includes multiple tiers of criteria that are applied in a hierarchical fashion to build the ideal system from the ground up.

### TEXAS HIGHWAY TRUNK SYSTEM

The Texas Highway Trunk System is a system of planned rural four-lane divided highways that includes and complements the interstate highway system in Texas (15). The concept evolved in the late 1980s to connect the major population centers in Texas and provide adequate access to the state’s major ports of entry and its military installations. It is perceived as being more efficient and safer than the rural two-lane highway network as it provides separation between oncoming traffic. It was also intended to increase mobility within the state and aid in economic growth.

The trunk system concept was based on three criteria: population, circuity of travel, and other considerations. The system is prioritized using population. The population centers are connected based on circuity of travel. Finally, other criteria and situations are examined and considered to include factors such as national defense needs, national parks/recreational facilities, and ports of entry.

The research team used county population and populations for the U.S. Census Primary Metropolitan Statistical Areas (PMSA) or Metropolitan Statistical Areas (MSA). The county population estimates were provided by the Texas Water Development Board (1990). The population categories used were: 1 million or larger; 300,000 to 1 million; 100,000 to 300,000; 50,000 to 100,000; 25,000 to 50,000; and 10,000 to 25,000. The circuity of travel criteria was based on two considerations. The first was the need to connect population centers, specifically smaller areas to larger areas. The second was the ability to travel between population centers with a minimum of circuity of travel. Circuity of travel is the direct connections between cities that are not more than 10% greater than the straight-line distance between the city pairs. Following the application of the final criteria mentioned above, the network is refined by connecting obvious gaps in the system.

The population areas were connected beginning with the 1 million or larger areas. The 300,000 or larger areas were then connected to the 1 million or larger areas and they were then connected to each other. The 100,000 or larger areas were then connected to the 1 million or larger areas and then to the 300,000 or larger areas. The 50,000 or larger areas were connected to the 1 million or larger areas. Not all categories were connected to each other because this would have yielded a costly network of highways.

A secondary set of criteria was then applied (15). All cities with a population of at least 20,000 were provided access to the established network using the primary criteria. Cities with a population of at least 10,000 were provided access to the network providing they were more than 25 miles from the established network. Roadways that connected with principal roadways in other states were added if they carried a minimum average daily traffic count of

1,000. Deepwater ports with 40-foot draft waterways that provided at least 1.5 million tons of goods per year were also provided access to the network. International crossings with Mexico were connected to the network if they carried a minimum count of 5,000 average daily traffic and were more than 25 miles from the network. Major truck routes were also added if they carried more than 1,850 trucks per day. Finally, major tourist and recreational areas and significant military bases were also provided access to the network. The network created with the primary and secondary criteria was then taken and further refined in the public involvement process.

## **CHAPTER 4. DEVELOPMENT OF IDEAL TEXAS AIRPORT SYSTEM CRITERIA**

Similar to the methodology of the Texas Highway Trunk System, the primary criterion used to develop this system is population. Population categories were developed for Texas counties similar to the categories used in the highway system. Using 1996 population estimates from the Texas State Data Center, counties were categorized in the following way: 1 million or larger; 250,000 to 1 million; 100,000 to 250,000; 50,000 to 100,000; 25,000 to 50,000; 10,000 to 25,000; and below 10,000. For the metropolitan areas, MSA and PMSA were used and included all of the counties in that particular MSA or PMSA. The research team used the 27 MSAs and PMSAs defined by the federal government located in the state encompassing 58 of the 254 counties in Texas. These areas are listed in Table 3. These metropolitan statistical areas use the following population categories: 1 million or larger; 250,000 to 1 million; 100,000 to 150,000; and under 100,000. The additional categories listed earlier break down further the Texas counties with populations under 100,000.

Statistical analysis of county population data showed that it is useful in identifying counties suitable for an airport. In using current data and identifying those counties in Texas with and without airports, there was a statistical difference between the population means for those counties with versus those without airports. It should be noted that counties where a proposed new airport was listed in the Texas Aeronautical Facilities Plan (4) were considered as having an airport to reflect the policy and planning decision-making that had already occurred. This difference suggests that population is a good indicator for determining the location of an airport. Further review of the data indicates that populations above approximately 6,500 may be capable of supporting an airport based on the current county and airport data. Based on this analysis and the methodology established in the Texas Highway Trunk System, the research team used population as the primary criteria in developing the "ideal" airport system. Further, the demographic breakdowns used in the Texas Highway Trunk System methodology and the U.S. Census Bureau are employed in the development of this system. These breakdowns range from those counties and MSAs/PMSAs above 1 million to those below 10,000.

**TABLE 3**  
**Metropolitan Statistical Areas (MSA) and Primary Metropolitan  
 Statistical Areas (PMSA) in Texas**

MSA/PMSA	Counties	Population
Houston	Chambers, Fort Bend, Harris, Liberty, Montgomery, and Waller	3,775,328
Dallas	Collin, Dallas, Denton, Ellis, Henderson, Hunt, Kaufman, and Rockwall	3,050,169
Fort Worth- Arlington	Hood, Johnson, Parker, and Tarrant	1,522,760
San Antonio	Bexar, Comal, Guadalupe, and Wilson	1,487,624
Austin-San Marcos	Bastrop, Caldwell, Hays, Travis, and Williamson	1,034,590
El Paso	El Paso	673,893
McAllen-Edinburgh-Mission	Hidalgo	496,485
Beaumont-Port Arthur	Hardin, Jefferson, and Orange	377,649
Corpus Christi	Nueces and San Patricio	376,566
Brownsville-Harlingen-San Benito	Cameron	312,064
Killeen-Temple	Bell and Coryell	296,265
Galveston-Texas City	Galveston	241,981
Odessa-Midland	Ector and Midland	239,978
Lubbock	Lubbock	233,496
Brazoria	Brazoria	219,898
Amarillo	Potter and Randall	209,165
Longview-Marshall	Gregg, Harrison, and Upshur	206,867
Waco	McLennan	202,679

**TABLE 3**  
**Metropolitan Statistical Areas (MSA) and Primary Metropolitan  
 Statistical Areas (PMSA) in Texas (continued)**

MSA/PMSA	Counties	Population
Laredo	Webb	177,147
Tyler	Smith	164,547
Wichita Falls	Archer and Wichita	140,255
Bryan-College Station	Brazos	138,093
Abilene	Taylor	127,440
Texarkana	Bowie and Miller (AK)	85,080 (123,877 Total)
San Angelo	Tom Green	104,973
Sherman-Denison	Grayson	100,611
Victoria	Victoria	81,023
Total	58 Counties	16,076,626

Source: *Texas Almanac, 1998-1999* and The Texas State Data Center 1996 Estimates.

Secondary criteria were used to identify additional counties capable of and suitable for inclusion into the airport system that were not added using the population criteria. This criterion, therefore, was used to identify airports in areas where populations fell below the 10,000 threshold. This secondary criterion is related to an area or county's financial capability for supporting an airport. Some counties or areas may include economic generators that other larger, more populated counties do not. Subsequently, a smaller county may have a larger per capita tax base for supporting an airport.

This secondary criterion consists of county retail sales values. The sales tax dollars returned to the county and the cities in those counties were not used as a criteria because there are counties and cities that do not levy any sales taxes. Further, while sales tax is a factor of the total retail sales in a particular city or county, it is subject to local tax policy that may or may not be consistent throughout the state. Therefore, retail sales values were selected to represent economic activity.

Statistical analysis of the county retail sales data showed that it is a useful variable in determining the location of an airport in the current system. The mean retail sales values for counties in Texas with airports were statistically different from those counties without airports indicating its usefulness as a measure. Further analysis showed that retail sales data

could be used to include those counties that were included in the first three quartiles of the retail sales data.

Additional criteria were also developed allowing for proper consideration of two of the largest industries in the state, agriculture and oil. Texas is a large and diverse state in many respects. Despite its several large population centers, Texas is a large rural state as well. These rural areas are often the venue for agricultural and oil production. These activities occur in the less populated regions of the state, but they provide a tremendous economic boost throughout the entire state and country. Because of the services needed in these rural areas and the reliance on the transportation system for maintaining operations, it is important to include these industries when considering access to the air transportation system. The primary and secondary criteria mentioned above do not account for these special situations and, therefore, additional criteria were developed to accommodate for the role they play in the state and national economies. This additional criterion includes agricultural cash values and mineral property tax for oil and gas.

Quartile analysis was also used to categorize and break down the county data with respect to oil and gas property tax and agricultural cash values. Both of these values provide more information about the economic make-up of a county that is not readily illustrated when reviewing population numbers or retail sales data.

In examining the data, it was determined that those counties whose oil and gas property tax values and agricultural cash values were in the top two quartiles, or above the median value for all 254 counties in the state, should be considered as viable locations for state system airports. This criterion pertains to those counties that do not meet the population or retail sales criteria. Therefore, this criterion should be more stringent because the counties do not have the benefit of population and retail sales activity to further support their claim of economic viability. Selecting those counties above the median levels for these values meets this demand.

## **CHAPTER 5. APPLICATION OF IDEAL AIRPORT SYSTEM CRITERIA**

The criteria developed previously were applied to identify the “ideal” airport system in Texas. As counties meet the criteria, the airports within the counties are added to the “ideal” system in a hierarchical fashion. No effort was made to determine whether a particular airport in a county was justified or should be located there. The airports were simply added to the system. This is noteworthy because there are metropolitan areas that contain several general aviation airports.

The efforts of this study were to identify an airport system that was a viable system. It was not to address current politics or policies. Therefore, when a county or region contained more than one airport, all airports were included. In addition, the corresponding coverage area for those airports was reported. The service coverage area consists of the population served by the airport and is calculated by including the population within a 25-mile driving radius, or 30-minute driving time, of the given airport. The basis for this measure is provided for in two ways. First, the Advisory Circular *Planning the State Aviation System* (AC 150/5050-3B) provides guidance for such a statement of objective. In this case, the advisory circular specifically refers to the “adequacy of general aviation airport facilities with reasonable surface access time to aircraft owners/users” (16). Secondly, The Texas Aeronautical Facilities Plan system goals and objectives state that “the goal of adequate air service has been expressed in terms of the proximity of activity centers to a TAFP airport.” More specifically, this goal is “to provide airports capable of supporting business jet activity within a 30-minute drive of population and mineral resource centers and the economic activity generated by urban development” and “to provide airports capable of supporting single- and twin-engined piston-powered aircraft within a 30-minute drive of agricultural resource centers” (4).

The appendices in the back of this report show the “ideal” system in the order that it was built and the criteria used to build it. Appendix A and Appendix B show the system and the criteria in terms of numbers and percentages of state totals, respectively. Appendix C shows the system and the aviation activity measures associated with it. Appendix D lists the sources for the data used in this analysis.

### **POPULATION**

Beginning with the primary criteria of population, counties meeting the population criteria were selected. The population criterion includes all counties whose population exceeded 10,000. This included 166 of the 254 counties in the state and covers 97% of the state’s population. One of these counties, Archer County, has a population that is less than 10,000 but it is included in this criteria group because it is part of the Wichita Falls Metropolitan Statistical Area. Of these 166 counties, 10 do not have airports. A total of five of these counties, Archer, Comal, Hays, Waller, and Wilson are included in the previously defined metropolitan statistical areas. The remaining five counties are Bandera, Callahan, Camp, Clay and San Jacinto.

Although Bandera County meets the population criteria, it does not have an airport. The county and its population center, however, are in close proximity to the new Kendall County-Boerne Airport proposed in the Texas Aeronautical Facilities Plan Summary (4). Callahan County also meets the population criteria but does not have an airport in the county. It is, however, adjacent to Taylor County and a significant amount of its population is in close proximity to the Abilene Regional Airport.

Camp County, located in the northeast corner of the state, does not have an airport despite meeting population, retail sales, and agriculture criteria. Factors influencing this are the county's population centers located within close proximity to three other airports in the area. These include the Mount Vernon/ Franklin County Airport, Mount Pleasant Municipal Airport, and Daingerfield/ Greater Morris County Airport.

Clay County is another county meeting the criteria that does not have an airport. It meets criteria for population, retail sales, and agricultural values. It is, however, adjacent to Wichita and Archer counties and has the majority of its population (70%) within a 25-mile radius of the Wichita Falls Municipal Airport.

San Jacinto County, which meets population, minerals, and retail sales criteria, does not have an airport despite the area's attraction as a large recreational area with the presence of Lake Livingston. This is mitigated by the presence of Livingston Municipal Airport in neighboring Polk County.

## **ECONOMIC ACTIVITY AND RETAIL SALES**

The second criterion applied to identify the "ideal" system is retail sales. The research team applied this criterion to the remaining 88 counties. In all, 27 counties were selected using this criterion and added to the "ideal" system. All of the 27 counties with one exception currently had airports in the county. The one exception, Dallam County, meets the retail sales and agriculture criteria and was the third largest agricultural producer in terms of net cash return for the year the data was collected. This is also the latest year for available Agricultural Census data that is collected every five years. Dallam County does not currently have an airport but its population is primarily located in Dalhart and is served by Dalhart Municipal airport.

## **RESOURCES - OIL, GAS, AND AGRICULTURE**

The third criterion is oil and gas property tax values and agricultural net cash return. This criterion was established to illustrate the importance of these two industries on a local, state, and national level and the significance of the transportation system to their operation and development. The need for an airport or a county's ability to support an airport in Texas may not be identified in only using population and retail sales criteria. The development of these mineral and agricultural criteria show that need and financial capability may be present when examining specific industries that have a substantial economic impact in the state.

This criterion was applied to the 61 remaining counties. Those counties that met or exceeded the median values for the county data were selected for inclusion to the "ideal" system. Under the oil and gas criteria, 30 counties were selected with an additional 14 being selected based on agricultural data. Of the additional 44 counties selected, 11 currently do not

have airports. These include Glasscock, Borden, McMullen, Irion, King, Sterling, Kenedy, Loving, Goliad, Throckmorton, and Armstrong. All of these counties were selected because they met the criteria for oil and gas property tax with the exception of Armstrong, which meets the agricultural criteria.

Despite meeting the criteria and not having an airport within the county, the counties listed above do have access to general aviation airports. Geographic boundaries aside, many of these counties are within a 25-mile driving radius of an airport. Glasscock County has very large oil and gas operations and a low population of approximately 1,500 people. Those living in the county, including those in the county seat of Garden City, have access to the airports in Midland County, which are approximately 40 miles away. Borden County also has significant oil and gas operations. It too has access to airports in the adjacent counties. These include Lamesa Municipal in Dawson County and Snyder's Winston Field in Scurry County, both approximately 35 miles away.

McMullen County meets the oil and gas criteria and has access to the George West Airport approximately 35 miles away in Live Oak County. Irion County, flanked by Reagan and Tom Green counties, has access to both of those counties' airports that are within 35 miles of the county's population centers. King County is surrounded by counties that have airports, the nearest being in neighboring Knox City, that is 35 miles east in Knox County.

Sterling County has access to both Mathis Field which is less than 50 miles southeast in Tom Green County and Robert Lee Airport which is approximately 35 miles east in Coke County. Neither of these facilities is within a 25-mile radius, but are reasonably close when considering the size and remote location of the county.

Kenedy County in South Texas is also surrounded by counties with airports. The 418 county residents have access to Kleberg County Airport to the north, Brooks County Airport in Falfurrias to the west, and Charles R. Johnson Airport in Willacy County to the south. The Kleberg County Airport and the Brooks County Airport are the nearest and are both approximately 25 miles from the county seat of Sarita, which includes almost all of the county's population.

Loving County in West Texas is the least populated county in the state. Although there is an extensive amount of oil and gas activity in the county, it is remote. It does, however, border New Mexico near what is a popular tourism location at Carlsbad, New Mexico. Residents of the county, primarily located in the city of Mentone, have access to the Winkler County Airport in Wink, approximately 40 miles away. The marginal distance for airport access is insignificant when considering the remote location and small population.

Goliad County is also surrounded by counties that have airports which are all approximately 30 to 35 miles away. Users can choose from Victoria Regional Airport in Victoria County, Rooke Field in Refugio County, Beeville Municipal Airport in Bee County, Karnes County Airport in Kenedy, and Cuero Municipal Airport in Dewitt County. Throckmorton County also has access to multiple airports. It is within 40 miles of the Haskell Municipal Airport in Haskell County and the Graham Municipal Airport in Young County. Armstrong County in the Panhandle is the final county selected that does not have an airport. Its proximity to two airports in the Amarillo area and Clarendon Municipal Airport in Donley County, all within approximately 40 miles, provide users access to the airport system.

## **ANALYSIS OF SPECIFIC COUNTIES**

All of the counties selected using the developed criteria that do not have airports have reasonable access to airports in the state airport system. While the counties themselves meet the established criteria, they do not have airports of their own. However, their lack of airports shows the lack of redundancy in the system as these counties already have access to the system. Additional airports in these counties may prove difficult to support considering that airports are nearby and the counties all have populations below 10,000, some of them well below this figure. Adding airports in these counties would impact the current airports, thus making it difficult for all of the airports in the region to be economically viable.

After application of the system criteria, 17 counties were not selected. They are listed in Table 4. Of these 17 counties, nine currently have airports. These counties include Collingsworth, Cottle, Donley, Foard, La Salle, Menard, Presidio, Real, and Shackelford. The research team studied these counties to determine why they have airports despite not meeting the established criteria.

**TABLE 4**  
**Counties Not Included Using Developed Criteria**

<b>County</b>	<b>Population</b>	<b>Airport Currently Located in County</b>
Blanco	7,352	No
Briscoe	2,038	No
Collingsworth	3,657	Yes
Cottle	2,117	Yes
Delta	5,014	No
Donley	3,905	Yes
Foard	1,845	Yes
Jeff Davis	2,061	No
Kinney	3,389	No
La Salle	5,911	Yes
Menard	2,339	Yes
Mills	4,964	No (Proposed)
Motley	1,436	No

**TABLE 4**  
**Counties Not Included Using Developed Criteria (Continued)**

County	Population	Airport Currently Located in County
Presidio	7,285	Yes
Real	2,740	Yes
Shackelford	3,413	Yes
Somervell	5,961	No

Collingsworth, Cottle, Donley, and Foard counties are located in the Panhandle and have economies based on agribusiness with mineral production of oil and gas. Shackelford County in North Texas has an economy based on oil and ranching much like those in the Panhandle. La Salle County is in South Texas and its economy is based on agribusiness along with oil and gas production components. Menard and Real counties in central Texas have agribusiness and tourism, respectively as the foundation of their economies. Menard County has oil and gas production while Real County has no significant mineral values but does have beef cattle operations. Real County is also a recreational center for hunting, fishing, and camping.

Presidio County is located in West Texas with an economy based on ranching and tourism. Like the other counties, it has a diversified economy given its size. It contains an international border crossing and serves as a sector headquarters for the U.S. Border Patrol. It is home to the Big Bend Ranch State Natural Area as well as the mysterious Marfa Lights, that add to its tourism value. In addition, Presidio County is in a remote locale and a majority of its population is not afforded reasonable access to any surrounding counties' airport facilities.

These counties as a group have agribusiness-based economies with the additional elements of oil, gas, and/or tourism, which includes hunting and other recreational activities, to further diversify their economic base. This points to the significance of agriculture, minerals, and tourism as an important component of the state's economy and as an important consideration in the need and value of transportation systems including airports. Further, it points to the value of a diversified economy, especially in light of smaller populations. Despite not meeting the three established criteria, these counties have operating airports. In addition, it should be noted that two of the above-mentioned counties have populations that are included in the category where they may be able to support an airport based on the population criteria alone. Nevertheless, all of these counties have several factors that contribute to their ability to support an aviation facility.

## **POPULATION SERVICE COVERAGE**

State aviation agencies often have goals or objectives of providing access to general aviation airports measured by driving time to the airport. Depending on the geological and geographic make-up of the state and the constraints present, this may or may not be possible. Ideally, it is preferable to provide this type of access to the population, but it is not always possible or financially feasible.

In the identification of the "ideal" system in Texas, the population coverage areas were determined for all of the airports in the current system. This was accomplished by calculating the population within a 25-mile driving radius of the particular airport. Table 5 lists the coverage areas for the 27 MSAs/PMSAs located in the state. The research team determined these coverage areas and attempted not to double count the population in neighboring areas. Population coverage was calculated in a hierarchical fashion so the largest population centers were determined first, followed by the non-overlapping population of the next largest area.

For example, the Houston MSA population was calculated first because it was the largest area defined. When calculating the Beaumont-Port Arthur population service area, the area that overlapped between the two areas was subtracted from the Beaumont-Port Arthur population because it was already counted in the Houston population service area.

**TABLE 5**  
**Population Service Areas For MSAs/PMSAs**

MSA/PMSA	Population Service Area	% of State Population (Cumulative)
Houston	4,012,397	21%
Dallas	3,303,354	38%
Fort Worth- Arlington	1,349,155	45%
San Antonio	1,488,741	53%
Austin-San Marcos	984,726	58%
El Paso	669,129	62%
McAllen-Edinburgh-Mission	567,157	63%
Beaumont-Port Arthur	363,942	67%
Corpus Christi	375,817	69%
Brownsville-Harlingen-San Benito	248,235	70%

**TABLE 5**  
**Population Service Areas For MSAs/PMSAs (continued)**

MSA/PMSA	Population Service Area	% of State Population (Cumulative)
Killeen-Temple	321,577	72%
Galveston-Texas City	133,470	72%
Odessa-Midland	241,053	73%
Lubbock	235,243	75%
Brazoria	133,638	75%
Amarillo	207,985	77%
Longview-Marshall	272,531	78%
Waco	186,001	79%
Laredo	177,147	80%
Tyler	165,144	81%
Wichita Falls	143,334	82%
Bryan-College Station	162,401	82%
Abilene	136,883	83%
Texarkana	85,080	83%
San Angelo	105,826	84%
Sherman-Denison	101,644	85%
Victoria	88,435	85%
Total	16,076,626	85%

After exhausting the MSA/PMSA service areas, the state's counties were calculated. If a particular county had more than one airport, the population within a 25-mile area was calculated for all of the airports eliminating double counts or overstating the population. This was conducted similarly to the MSA/PMSA analysis to avoid a discussion concerning which airport in the area was more significant than the other(s). The populations listed in the table are the populations within a 25-mile driving radius and if the area overlaps a larger area, it is

the additional population served. The percentages are the cumulative percent of state population served. It is evident that the majority of the population resides in the urban areas of the state.

When the research team built the "ideal" system by applying the criteria, the population coverage or service area increased. As the criteria were applied, the marginal increase in coverage area decreased. This was expected considering that 85% of the population is covered in the 27 largest urban areas in the state. The population criteria accounted for 97% of the state's population. Adding the retail sales, oil and gas, and agriculture criteria increased the coverage to 98%. Table 6 shows the population coverage for all of the population categories as a percentage of the state's total population. The population coverage areas are, again, the populations within a 25-mile radius of the airports in those respective counties whose populations are in the given category. The specific coverage populations, or percentages, for a particular county or airport are listed in the Appendices.

**TABLE 6**  
**State Population Coverage of Airports in Population Categories**

MSA/PMSA/County Population	Population Coverage as a Percent of State Total
27 MSAs/PMSAs	85%
50,000-100,000	86%
25,000-50,000	92%
10,000-25,000	97%
Below 10,000	98%

#### **ADDITIONAL INDICATORS**

To better illustrate the optimization of the airport system, it is advantageous to examine other resources and economic indicators that fall within the 25-mile service areas of the system's airports. Further, it is important to examine aviation-related measures as well. The aviation measures analyzed were based aircraft and airport operations. The other economic and resource related elements include oil and gas property tax, total property tax, retail sales, employment, and agricultural net cash return. Some of these variables were used in the analysis above as criteria for developing an "ideal" airport system. Illustrating the magnitude of these factors present within the 25-mile service area of the state's airports will clearly point out their significance to the state's economy and future.

Table 7 shows the aviation measures for the 27 MSAs/PMSAs in the state. A total of 76% of the state's based aircraft are based at airports in the 27 MSAs/PMSAs while 83% of the state's aircraft operations occur at airports located in those same areas.

**TABLE 7**  
**Aviation Measures for the MSAs/PMSAs As a Cumulative Percent of State Totals**

MSA/PMSA	Based Aircraft	Airport Operations
Houston	13%	15%
Dallas	30%	27%
Fort Worth- Arlington	41%	48%
San Antonio	41%	52%
Austin-San Marcos	47%	57%
El Paso	51%	59%
McAllen-Edinburgh-Mission	52%	60%
Beaumont-Port Arthur	54%	61%
Corpus Christi	55%	63%
Brownsville-Harlingen-San Benito	56%	65%
Killeen-Temple	57%	66%
Galveston-Texas City	59%	67%
Odessa-Midland	62%	69%
Lubbock	63%	71%
Brazoria	65%	72%
Amarillo	66%	74%
Longview-Marshall	67%	75%
Waco	69%	77%
Laredo	69%	78%
Tyler	70%	78%
Bryan-College Station	71%	79%
Wichita Falls	72%	80%
Abilene	73%	81%

**TABLE 7**  
**Aviation Measures for the MSAs/PMSAs As a Cumulative Percent of State Totals**  
**(Continued)**

MSA/PMSA	Based Aircraft	Airport Operations
Texarkana	74%	82%
San Angelo	75%	83%
Sherman-Denison	76%	83%
Victoria	76%	83%
<b>Total</b>	<b>76%</b>	<b>83%</b>

While it is clear that the majority of aviation activity occurs in the largest urban areas of the state, Table 8 provides an indication of the remaining aviation activity in the state with respect to the county population categories. Despite the heavy activity in the urban areas, there is no indication that the remaining aviation activities lack importance or significance to the state or its rural communities. Airports play a significant role in rural communities as well as regions outside of the 27 MSAs/PMSAs.

**TABLE 8**  
**State Aviation Activity with Respect to Population Categories**

MSA/PMSA/County Population	Based Aircraft	Airport Operations
27 MSAs/PMSAs	76%	83%
50,000-100,000	78%	84%
25,000-50,000	87%	91%
10,000-25,000	95%	96%
Below 10,000	100%	100%

Table 9 shows the additional economic/resource elements mentioned above while Table 10 shows the breakdown of these elements with respect to the population categories.

**TABLE 9**  
**Economic/Resource Measures for the MSAs/PMSAs**  
**As a Cumulative Percent of State Totals**

MSA/PMSA	Oil & Gas Property Tax	Property Tax	Retail Sales	Employment	Agriculture Cash Return
Houston	4%	23%	24%	24%	2%
Dallas	5%	43%	46%	46%	3%
Fort Worth- Arlington	5%	44%	48%	47%	4%
San Antonio	5%	50%	55%	55%	4%
Austin-San Marcos	6%	57%	61%	61%	5%
El Paso	6%	59%	64%	64%	6%
McAllen-Edinburgh- Mission	8%	60%	65%	66%	8%
Beaumont-Port Arthur	8%	63%	67%	67%	8%
Corpus Christi	10%	64%	68%	69%	9%
Brownsville- Harlingen-San Benito	10%	65%	69%	70%	9%
Killeen-Temple	10%	66%	71%	71%	10%
Galveston-Texas City	10%	67%	71%	72%	10%
Odessa-Midland	16%	68%	73%	73%	10%
Lubbock	17%	69%	74%	74%	11%
Brazoria	17%	69%	74%	75%	11%
Amarillo	17%	70%	75%	76%	13%
Longview-Marshall	22%	71%	76%	77%	14%
Waco	22%	71%	77%	78%	15%
Laredo	24%	72%	78%	78%	15%
Tyler	24%	73%	79%	79%	15%
Bryan-College Station	25%	74%	79%	80%	16%

**TABLE 9**  
**Economic/Resource Measures for the MSAs/PMSAs**  
**As a Cumulative Percent of State Totals (Continued)**

MSA/PMSA	Oil & Gas Property Tax	Property Tax	Retail Sales	Employment	Agriculture Cash Return
Wichita Falls	25%	74%	80%	81%	17%
Abilene	26%	75%	81%	81%	17%
Texarkana	26%	75%	81%	82%	18%
San Angelo	26%	75%	81%	82%	18%
Sherman-Denison	26%	76%	82%	83%	18%
Victoria	26%	76%	82%	83%	19%
<b>Total</b>	<b>26%</b>	<b>76%</b>	<b>82%</b>	<b>83%</b>	<b>19%</b>

As shown in Table 9, the preponderance of property tax, retail sales, and employment in the state is found in the larger urban areas. The majority of the oil and gas and agricultural activity, however, is not found in these areas. Table 10 clearly articulates the parts of the state, with respect to size, where these activities are more prominent. This indicates the magnitude of these resources in rural parts of the state and stresses the importance of providing access to these areas through airports. Approximately 20% of oil and gas property tax and 30% of the agricultural net cash return emanate from counties with populations less than 10,000. This is illustrated by looking at the additional or incremental percentages in the cumulative table below for counties less than 10,000 in population. For example, oil and gas property tax for the counties of population 10,000 and larger comprises 71% of the state's total. By adding in counties with populations less than 10,000, the cumulative percentage jumps to 91% of the state total. Aside from the development and application of system optimization criteria, the activity shown here occurring in the state's smaller counties is a compelling argument for providing access to the rural parts of the state. Tables 9 and 10 show cumulative percentages and do not add to 100% because only those counties with airports are included. The remaining activity occurs in the counties where there are no airports which tend to be rural as well. Therefore, the economic impacts of rural communities are somewhat understated despite their already determined significance.

**TABLE 10**  
**State Economic/Resource Activity As a Cumulative Percent of State Totals for**  
**Population Categories**

<b>MSA/PMSA/ County Population</b>	<b>Oil &amp; Gas Property Tax</b>	<b>Property Tax</b>	<b>Retail Sales</b>	<b>Employment</b>	<b>Agriculture Cash Return</b>
27 MSAs/PMSAs	26%	76%	82%	83%	19%
50,000-100,000	27%	77%	83%	84%	20%
25,000-50,000	36%	83%	89%	88%	37%
10,000-25,000	71%	89%	92%	91%	64%
Below 10,000	91%	92%	93%	93%	93%

### **OPTIMIZATION**

The best method to view optimization of the current system is to examine it juxtaposed to the system developed here using the Texas Highway Trunk System methodology. That ideal system, presented in the appendices of this report, shows the ideal system and the criteria used to build it in a hierarchical manner. In addition to the MSA/PMSA/County, the airport name is presented along with its based aircraft and operations data. Further, additional resource/economic elements are included along with their values. These represent the resource/economic element's value within a 25-mile radius of particular airports. Table 11 presents a comparison between these two systems in terms of percentages of the state totals of these various aviation and economic/resource measures that are within the 25-mile service area of the airports. The systems are nearly identical except for some airports in counties with populations below 10,000.

**TABLE 11**  
**Comparison of Current and Ideal Systems As Percent of State Totals**

<b>System</b>	<b>Based Aircraft</b>	<b>Aircraft Operations</b>	<b>Oil &amp; Gas</b>	<b>Property Tax</b>	<b>Retail Sales</b>	<b>Employ- ment</b>	<b>Agriculture</b>
Current	100	100	91%	92%	93%	93%	93%
Ideal	99	100	91%	92%	93%	92%	92%

Both systems serve approximately 98% of the state's population. The current system serves just under 20,000 additional people with 10 additional airports than the ideal system identified above. The current system, in terms of the state as a whole, is similar to the "ideal" system. When special consideration is given on an individual basis for unique situations,

some of those counties and airports not included using the developed criteria may be capable of supporting an airport on their own merits.

## CHAPTER 6. CONCLUSIONS AND RECOMMENDATIONS

General aviation includes all the flying that is not conducted by the airlines or the military. While less visible than the commercial air carriers, it is no less important. The literature shows that the general aviation airport concept is not well understood simply because it is not marketed as widely as other products or services. General aviation airports are often overlooked and taken for granted despite playing vital roles in many communities.

These airports are important in several industries including agriculture, mining, fishing, emergency services, and oil and gas exploration and production. They also play a role in larger urban areas where they serve as economic hubs and relieve the larger air carrier airports of smaller traffic thus increasing system capacity. The users are not limited to recreational flyers and wealthy individuals, but include all industries both large and small, which often require adequate aviation facilities before making business location decisions.

Funding continues to be a problem as there simply is not enough money to operate and maintain these airports adequately. Airport managers are very concerned and some have turned to innovative financing methods. Consequently, these managers have become more attuned to public relations to develop support for their airports.

Access to rural communities is of particular concern. Small rural communities are often more dependent on these aviation facilities than other communities. They are essential in attracting and maintaining businesses so the community can remain competitive. They are also critical to certain industries such as agriculture that has special needs and contributes greatly to the economy. Agriculture is big business in Texas and other states and this industry relies on these facilities to operate.

Interviews with several state aviation offices revealed that none have taken steps to optimize their state airport systems. While several states have completed or are in the process of undertaking classification studies, none have sought to define an "ideal" airport system. Not all of the states interviewed are having difficulty funding their needs, but there does appear to be a consensus that it is becoming more difficult. It is expected that these functional classification studies will help states prioritize airports and specific projects for funding. However, they will not define an optimal or "ideal" system.

To identify an "ideal" system, specific criteria were developed based on the methodology used to create the Texas Highway Trunk System. These criteria included population, retail sales, oil and gas property tax, and agricultural net cash return values. An "ideal" system was developed and it was similar in size and coverage as the current state airport system. Both systems were analyzed in terms of the amount of state economic and natural resources, as well as the aviation activity that occurred within a 25-mile driving radius of the state's airports. The service areas in the two systems are nearly identical.

This analysis strengthened what was already known and highlighted other important aspects of the airport system usually not considered. As expected, the analysis showed that most of the state's economic activity occurs in the larger urban areas while the state's mineral and agricultural production occurs largely in the more rural areas. The challenge in the study was to ascertain a county's or community's ability to support an airport where the population

totaled less than 10,000. While other criteria were established and applied to identify areas capable of supporting an airport, it is not always straightforward.

There is no magic number below the 10,000-population benchmark for airport support capability because communities and counties are unique. Some have small populations, and low economic activity, but survive or are capable of supporting an airport for a number of reasons. Some have large tourism industries, some have economies based on industrial or manufacturing whose activities have not been clearly captured here, while others benefit from their geographic proximity to other counties that do meet established criteria.

Nevertheless, determining the viability of smaller communities to support an airport is a challenge. Their capabilities do not emerge clear and convincingly from the established criteria, but they provide access to parts of the state that generate a tremendous amount of economic activity through mineral and agricultural activity. They often contribute in more ways not articulated in this analysis.

This research explored not only the economic, resource, and aviation characteristics of the state, but characteristics of the current airport system as well in an effort to identify an “ideal” system. This resulted in the following:

- The identified “ideal” airport system is nearly identical to the current airport system. The specific differences have been discussed in Chapter 5 (pages 23-27).
- Difficulty remains in clearly determining support capabilities among smaller communities whose economic profiles are not standard. This allows them to be overlooked when considering typical indicators or criteria.
- A focus is needed on understanding the needs and contributions of agricultural airports and those that serve the oil and gas industry in the rural parts of the state. The economic activity that they generate is significant, yet the importance of the facilities in rural, low-populated areas is not often realized when using typical socioeconomic criteria.
- A focus is also needed on understanding the role each airport plays in the system and in the community. This would clearly identify not only the benefits derived by the facility, but also the cost involved with providing the type of facility needed or required by the community regardless of population size. This would also help identify the special or unique situations in a particular region or community that are not readily apparent when reviewing standard socioeconomic criteria for the capability of supporting an airport. Often, the extent or magnitude of a unique factor such as tourism or oil and gas exploration and production is not sufficiently known and makes it difficult to determine whether it should be given special consideration.

In the final analysis, it is clear that the current airport system provides adequate airport access to the people of the state. Approximately 98% of the state’s population is located within a 25-mile driving radius of an aviation facility. More than 90% of the state’s

property tax, retail sales, employment, oil and gas, and agricultural activity occurs within a 25-mile radius of an airport. Access to the system is sufficient and the economic activity of the state, as measured in several ways, has ready access to the system.



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**Appendix A**  
**Application of Ideal System Criteria**



Application of Ideal System Criteria

Criteria Used	Population Category	MSA/PA/COUNTY	NAME	Airport	Population 25-Mile Radius		Cumulative Population Coverage		Property Tax (In Millions\$)		Oil & Gas Property Tax		Retail Sales		Agriculture Net Cash Return			
					0	4,012,397	\$1,093,452,402	\$186,359	\$52,787,342,720	1,962,332	1,962,332	\$24,167,817						
Population	1 Million +	HOUSTON	Harris	East Grand Parkway(New)	0	407,543												
Population	1 Million +		Harris	David Wayne Hooks Memorial Field	0	1,987,813												
Population	1 Million +		Harris	Ellington Field	0	1,987,813												
Population	1 Million +		Harris	Houston Intercontinental	0	331,122												
Population	1 Million +		Harris	West Houston	0	1,351,756												
Population	1 Million +		Harris	Houston Westside(New)	0	0												
Population	1 Million +		Harris	William P. Hobby	0	2,549,833												
Population	1 Million +		Harris	La Porte Municipal	0	1,037,926												
Population	1 Million +		Chambers	Chambers County	0	28,814												
Population	1 Million +		Chambers	Chambers County-Winnie Stowell	0	22,052												
Population	1 Million +		Fort Bend	Sugar Land Municipal	0	1,516,110												
Population	1 Million +		Fort Bend	Houston-Southwest	0	1,384,887												
Population	1 Million +		Liberty	Cleveland Municipal	0	32,718												
Population	1 Million +		Liberty	Liberty Municipal	0	44,052												
Population	1 Million +		Montgomery	Montgomery County	0	230,012												
Population	1 Million +		Walker															
Population	1 Million +	DALLAS	Dallas	Addison	0	2,400,534	3,303,354	\$351,564,433	\$157,227	\$48,634,596,508	1,827,687	1,827,687	\$22,075,071					
Population	1 Million +	DALLAS	Dallas	Dallas Love Field	0	1,950,172												
Population	1 Million +	Dallas	Dallas	Redbird	0	2,755,405												
Population	1 Million +	Dallas	Dallas	Lancaster	0	1,601,393												
Population	1 Million +	Dallas	Dallas	Phil L Hudson Municipal	0	429,505												
Population	1 Million +	Dallas	Dallas	McKinney Municipal	0	412,101												
Population	1 Million +	Denton	Denton	Denton Municipal	0	372,824												
Population	1 Million +	Denton	Denton	Ellis	0	78,483												
Population	1 Million +	Denton	Denton	MiddlelothianWaxahachie Municipal	0	264,124												
Population	1 Million +	Henderson	Henderson	Athens Municipal	0	67,571												
Population	1 Million +	Hunt	Hunt	Caddo Mills Municipal	0	56,893												
Population	1 Million +	Hunt	Hunt	Commerce Municipal	0	55,624												
Population	1 Million +	Hunt	Hunt	Major's	0	83,172												
Population	1 Million +	Kaufman	Kaufman	Terrell Municipal	0	72,726												
Population	1 Million +	Rockwall	Rockwall	Rockwall Municipal	0	485,211												
Population	1 Million +	Tarrant	Tarrant	Arlington Municipal	0	1,921,165	1,349,155	\$108,078,003	\$12,758	\$3,237,924,435	111,433	\$11,401,832						
Population	1 Million +	Tarrant	Tarrant	Dallas-Fort Worth International	0	2,913,268												
Population	1 Million +	Tarrant	Tarrant	Fort Worth Alliance	0	1,547,986												
Population	1 Million +	Tarrant	Tarrant	Fort Worth Meacham	0	1,327,538												
Population	1 Million +	Tarrant	Tarrant	Fort Worth Spinks	0	1,072,228												
Population	1 Million +	Tarrant	Tarrant	Fort Worth Carswell	0	1,220,717												
Population	1 Million +	Tarrant	Tarrant	Grand Prairie Municipal	0	2,347,638												
Population	1 Million +	Hood	Hood	Granbury Municipal	0	38,911												
Population	1 Million +	Johnson	Johnson	Cleburne Municipal	0	117,589												
Population	1 Million +	Parker	Parker	Mineral Wells	0	63,109												
Population	1 Million +	Parker	Parker	Weatherford (New)	0	0												
Population	1 Million +	Bexar	Bexar	San Antonio International	0	1,346,131	1,488,741	\$52,263,096	\$47,980	\$17,234,561,545	622,378	\$9,244,947						
Population	1 Million +	Bexar	Bexar	Stinson Municipal	0	1,301,291												
Population	1 Million +	Comal	Comal															
Population	1 Million +	Guadalupe	Guadalupe															
Population	1 Million +	Wilson	Wilson															
Population	1 Million +	AUSTIN-SAN MARCOS MSA	Travis	Austin(New)	0	984,726	\$125,319,211	\$50,982	\$12,541,144,060	529,655	\$11,784,391							
Population	1 Million +	AUSTIN-SAN MARCOS MSA	Travis	Austin Executive Airpark	0	740,307												
Population	1 Million +	Robert Mueller	Travis															
Population	1 Million +	Smithville Municipal	Bastrop		51,946													
Population	1 Million +	Lockhart Municipal	Caldwell		31,266													

Application of Ideal System Criteria

Criteria Used	Population Category	MSA/PHIS/ACCOUNT	NAME	Airport	Population 25-Mile Radius		Cumulative Population Coverage	Oil & Gas Property Tax (In Millions)	Property Tax	Retail Sales	Employment
					31,218	\$13,847					
Population 1 Million +	Caldwell	The Carter Memorial									
Population 1 Million +	Caldwell	San Marcos Municipal									
Population 1 Million +	Hays										
Population 1 Million +	Williamson	Georgetown Municipal	159,106								
Population 1 Million +	Williamson	Taylor Municipal	105,313								
Population 250,000 to 1,000,000	EL PASO MSA	El Paso International	661,477	669,129	\$172,118	\$5,110,417,459	230,189	\$11,464,501			
Population 250,000 to 1,000,000	El Paso	West Texas	664,553								
Population 250,000 to 1,000,000	El Paso	Fabens	363,497								
Population 250,000 to 1,000,000	Hidalgo	Edinburg Rio Grande Valley Regional	415,116	567,157	\$573,713,060	\$11,737	\$4,069,207,814	155,622	\$31,727,663		
Population 250,000 to 1,000,000	Hidalgo	McAllen Miller International	417,675								
Population 250,000 to 1,000,000	Hidalgo	Mid Valley	388,630								
Population 250,000 to 1,000,000	Hardin	Hawthorne Field	154,918	363,942	\$259,451,893	\$17,612	\$3,153,825,492	145,182	\$2,432,986		
Population 250,000 to 1,000,000	Jefferson	Beaumont Municipal	297,666								
Population 250,000 to 1,000,000	Jefferson	Jefferson County	287,965								
Population 250,000 to 1,000,000	Orange	Orange County	368,238								
Population 250,000 to 1,000,000	Nueces	Bishop Municipal	55,716	375,817	\$423,352,248	\$14,217	\$3,520,456,859	148,016	\$3,444,657		
Population 250,000 to 1,000,000	Nueces	Corpus Christi International	380,836								
Population 250,000 to 1,000,000	Nueces	Mustang Beach	320,829								
Population 250,000 to 1,000,000	Nueces	Nueces County	369,301								
Population 250,000 to 1,000,000	San Patricio	Aranas Pass	319,378								
Population 250,000 to 1,000,000	San Patricio	T.P. McCampbell	320,829								
Population 250,000 to 1,000,000	San Patricio	San Patricio County	37,693								
Population 250,000 to 1,000,000	S Cameron	Brownsville/South Padre Island Int'l.	204,523	248,235	\$112,956,544	\$5,266	\$1,631,708,682	73,966	\$13,922,035		
Population 250,000 to 1,000,000	Cameron	Rio Grande Valley International	248,235								
Population 250,000 to 1,000,000	Cameron	Port Isabel-Cameron County	213,617								
Population 250,000 to 1,000,000	Cameron	San Benito Municipal	315,289								
Population 250,000 to 1,000,000	Bell	Killeen Municipal	185,761	321,577	\$103,400	\$7,785	\$3,611,126,155	97,091	\$3,972,663		
Population 250,000 to 1,000,000	Bell	Draughan Miller Municipal	242,229								
Population 250,000 to 1,000,000	Coryell	Gatesville City-County	42,228								
Population 250,000 to 1,000,000	Galveston	Galveston Municipal/Schles Field	241,981	133,470	\$26,163,746	\$6,335	\$960,817,088	47,057	\$186,576		
Population 100,000 to 250,000	Galveston	Houston Gulf	556,489								
Population 100,000 to 250,000	Ector	Odessa-Schlemeyer Field	225,565	241,053	\$1,884,410,078	\$8,530	\$2,827,316,279	101,317	\$10,247,473		
Population 100,000 to 250,000	Midland	Midland Airport	212,563								
Population 100,000 to 250,000	Midland	Midland International	216,481								
Population 100,000 to 250,000	Lubbock	Lubbock International	232,974	235,243	\$52,036,154	\$7,204	\$3,012,168,243	110,427	\$14,083,768		
Population 100,000 to 250,000	Lubbock	Lubbock Station Municipal	224,071								
Population 100,000 to 250,000	Brazoria	Brazoria County	219,698	133,633	\$15,753,171	\$887	\$117,639,540	5,101	\$263,519		
Population 100,000 to 250,000	Brazoria	Clover Field	2,436,823								
Population 100,000 to 250,000	Gregg	Gladewater Municipal	87,766	272,531	\$1,334,023,188	\$8,177	\$2,233,578,053	82,790	\$15,196,503		
Population 100,000 to 250,000	Gregg	Gregg County	183,380								
Population 100,000 to 250,000	Harrison	Harrison County	60,249								
Population 100,000 to 250,000	Upshur	Gilmer-Upshur County	83,354								
Population 100,000 to 250,000											
Population 100,000 to 250,000											

Application of Ideal System Criteria

Criteria Used	Population Category	MSA/MICROCOUNTY	NAME	Airport	Property Tax			Retail Sales (\$ in Millions \$)	Employment	Agriculture Net Cash Return	
					Population 25-Mile Radius	Cumulative Population Coverage	Oil & Gas Property Tax				
Population 100,000 to 250,000	WACO MSA	McLennan	McGregor Municipal	190,268	186,001	\$8,913,292	\$5,348	\$1,503,841,734	80,079	\$10,131,579	
Population 100,000 to 250,000	WACO MSA	McLennan	TSTC Waco	197,106	205,081						
Population 100,000 to 250,000	WACO MSA	McLennan	Waco Regional	205,081							
Population 100,000 to 250,000	LAREDO MSA	Webb	Laredo International	177,147	177,147	\$584,863,150	\$5,494	\$1,639,011,289	58,644	\$4,137,000	
Population 100,000 to 250,000	TYLER MSA	Smith	Tyler Pounds Field	186,153	185,144	\$100,125,174	\$6,372	\$1,043,602,229	74,901	\$4,327,553	
Population 100,000 to 250,000	WICHITA FALLS MSA	Wichita	Kickapoo Downtown Airpark	140,076	146,467	162,401	\$233,678,597	\$5,858	\$1,585,595,337	73,823	\$7,606,791
Population 100,000 to 250,000	WICHITA FALLS MSA	Wichita	Stephens AFB/Wichita Falls Municipal	141,976							
Population 100,000 to 250,000	BRYAN-COLLEGE STATION MSA	Brazos	Coulter Field	158,037							
Population 100,000 to 250,000	BRYAN-COLLEGE STATION MSA	Brazos	Easterwood Field								
Population 100,000 to 250,000	WICHITA FALLS MSA	Archer		143,334	\$114,026,301	\$4,720	\$1,234,002,643		55,527	\$11,360,920	
Population 100,000 to 250,000	TEXARKANA MSA	Bowie	New Boston (new)	85,080	\$6,911,630	\$2,583	\$892,199,120		33,556	\$4,205,000	
Population 100,000 to 250,000	TEXARKANA MSA	Bowie	Texarkana Regional Webb Field	85,080							
Population 100,000 to 250,000	SHERMAN-DENISON MSA	Grayson	Miller,Co,A,K								
Population 100,000 to 250,000	SHERMAN-DENISON MSA	Grayson	Tom Green	105,826	\$105,547,899	\$3,236	\$995,559,180		41,744	\$4,175,100	
Population 50,000 to 100,000	VICTORIA MSA	Victoria	Mathis Field	95,307	101,644	\$68,066,156	\$3,568	\$1,062,524,575	42,237	\$3,466,668	
Population 50,000 to 100,000	VICTORIA MSA	Victoria	Sherman Municipal	100,611							
Population 50,000 to 100,000	VICTORIA MSA	Victoria	Grayson County								
Population 50,000 to 100,000	ANGELINA	Angelina	Angelina County	76,924	75,924	\$1,182,177	\$1,220	\$392,200,932	17,721	\$732,589	
Population 50,000 to 100,000	NACOGDOCHES	Nacogdoches	A.L.Mangham Jr. Regional	105,032	59,321	\$88,444,001	\$1,950	\$649,730,365	22,341	\$18,672,776	
Population 50,000 to 100,000	WALKER	Walker	Huntsville Municipal	56,253	55,211	\$1,976,943	\$1,214	\$405,363,595	21,510	\$3,164,004	
Population 50,000 to 100,000	ANDERSON	Anderson	Palestine Municipal	50,833	44,522	\$63,067,777	\$1,450	\$3,367,428,027	14,861	\$1,079,416	
Population 25,000 to 50,000	STARR	Starr	Starr County	46,527	43,610	\$295,921,103	\$1,101	\$188,978,839	7,335	\$15,221,096	
Population 25,000 to 50,000	LAMAR	Lamar	Cox Field	52,003	51,753	\$16,967,237	\$488	\$79,178,265	3,710	\$5,561,896	
Population 25,000 to 50,000	RUSK	Rusk	Rusk County	68,038	20,507	\$82,467,791	\$790	\$132,999,777	6,672	\$4,718,902	
Population 25,000 to 50,000	MAVERICK	Maverick	Eagle Pass (New)			\$0	\$0		0	\$0	
Population 25,000 to 50,000	CHEROKEE	Navarro	Cherokee County	74,518	29,349	\$36,760,691	\$946	\$481,119,490	11,937	\$18,532,769	
Population 25,000 to 50,000	VALVERDE	Val Verde	Del Rio International	35,972	35,972	\$20,533,498	\$795	\$243,314,418	8,890	\$432,392	
Population 25,000 to 50,000	NAVARRO	Navarro	C. David Campbell Field-Corsicana M	45,425	43,125	\$41,337,530	\$1,620	\$344,695,913	15,450	\$3,309,838	
Population 25,000 to 50,000	KERR	Kerr	Kerrville Municipal/Louis Schreiner Fld	38,636	\$19,636	\$1,930	\$418,112,687	12,704	\$123,049		
Population 25,000 to 50,000	WHARTON	Wharton	Wharton Municipal	51,616	50,427	\$183,201,611	\$7,248	\$397,566,422	16,359	\$19,216,744	
Population 25,000 to 50,000											

Application of Ideal System Criteria

Criteria Used	Population Category	MSA/MSA/County	NAME	Airport	Cumulative Population Coverage			Oil & Gas Property Tax (in Millions \$)	Retail Sales	Employment TO 361	Agriculture Net Cash Return
					25-Mile Radius	25-Mile Radius	21.878	42,627	\$212,972,750	\$1,900	\$394,930,071
Population 25,000 to 50,000	Wise	Wise	Bridgeport Municipal		39,462						
Population 25,000 to 50,000	Wise	Wise	Decatur Municipal								
Population 25,000 to 50,000	Jim Wells	Jim Wells	Alice International		51,455	32,660	556,387,112	\$755	\$210,422,636	10,328	\$4,357,486
Population 25,000 to 50,000	Matagorda	Matagorda	Bay City Municipal		45,986	41,188	\$91,445,665	\$4,576	\$268,608,749	13,529	\$5,501,352
Population 25,000 to 50,000	Matagorda	Matagorda	Palacios Municipal		20,153						
Population 25,000 to 50,000	Brown	Brown	Brownwood Municipal		38,303	38,303	\$8,505,781	\$1,253	\$329,214,217	14,353	\$4,254,080
Population 25,000 to 50,000	Hale	Hale	Abernathy Municipal		122,401	39,660	\$28,864,627	\$1,320	\$2,153,729,607	16,474	\$20,837,044
Population 25,000 to 50,000	Hale	Hale	Hale County		34,267						
Population 25,000 to 50,000	Alascosa	Alascosa	Pleasanton Municipal		30,502	25,473	\$15,887,256	\$186	\$26,311,034	1,162	\$1,195,551
Population 25,000 to 50,000	Jasper	Jasper	Jasper County-Bell Field		34,684	48,035	\$103,303,724	\$2,478	\$401,971,182	12,637	\$1,420,354
Population 25,000 to 50,000	Jasper	Jasper	Kirbyville		23,132						
Population 25,000 to 50,000	Medina	Medina	Castroville Municipal		1,186,758	53,310	\$29,375,703	\$761	\$149,265,419	6,840	\$7,202,969
Population 25,000 to 50,000	Medina	Medina	Devine Municipal		23,242						
Population 25,000 to 50,000	Medina	Medina	Hondo Municipal		23,576						
Population 25,000 to 50,000	Wood	Wood	Mineola-Duitman		59,165	50,104	\$298,120,850	\$2,183	\$553,005,759	13,087	\$23,283,848
Population 25,000 to 50,000	Wood	Wood	Wimberley Municipal		32,481						
Population 25,000 to 50,000	Howard	Howard	Big Spring McMahon-Winkie		37,401	34,834	\$392,701,956	\$1,505	\$274,917,373	11,790	\$6,612,780
Population 25,000 to 50,000	Cooke	Cooke	Gainesville Municipal		45,147	38,526	\$52,086,928	\$1,560	\$419,079,690	13,977	\$3,468,907
Population 25,000 to 50,000	Kleberg	Kleberg	Kleberg County		62,921	5,659	\$13,880,794	\$142	\$36,679,318	1,783	\$550,688
Population 25,000 to 50,000	Hopkins	Hopkins	Sulphur Springs Municipal		42,975	3,618	\$2,053,335	\$142	\$44,840,705	1,287	\$3,196,089
Population 25,000 to 50,000	Erath	Erath	Dublin Municipal		37,236	40,515	\$9,526,491	\$2,943	\$350,981,477	15,207	\$45,598,690
Population 25,000 to 50,000	Erath	Erath	Clark Field Municipal		37,481						
Population 25,000 to 50,000	Cass	Cass	Atlanta Municipal		31,080						
Population 25,000 to 50,000	Hill	Hill	Hillsboro Municipal		34,152	19,131	\$42,744	\$715	\$189,522,713	5,248	\$3,526,416
Population 25,000 to 50,000	Burnet	Burnet	Burnet Municipal Kate Caddock Field		35,878						
Population 25,000 to 50,000	Washington	Washington	Brenham Municipal		56,485	53,733	\$173,844,513	\$2,993	\$28,694,339	20,177	\$2,825,834
Population 25,000 to 50,000	Bee	Bee	Beeville Municipal		25,356	22,687	\$49,318,942	\$627	\$120,332,683	6,999	\$1,308,195
Population 25,000 to 50,000	Fannin	Fannin	Jones Field		31,760	24,462	\$1,893,794	\$776	\$154,819,366	6,782	\$1,329,974
Population 25,000 to 50,000	Palo Pinto	Palo Pinto	Possum Kingdom		6,308	3,098	\$7,397,911	\$119	\$25,982,234	965	\$80,379
Population 25,000 to 50,000	Titus	Titus	Mount Pleasant Municipal		60,777	46,208	\$66,029,171	\$2,414	\$416,038,931	21,420	\$11,142,071
Population 25,000 to 50,000	Hutchinson	Hutchinson	Hutchinson County		30,365	30,365	\$302,906,958	\$1,802	\$180,812,938	11,961	\$17,519,216
Population 25,000 to 50,000	Uvalde	Uvalde	Garnett Field		25,955	24,263	\$1,809,817	\$943	\$189,447,970	7,919	\$9,930,923
Population 10,000 to 25,000	Gray	Gray	McLean / Gray County		6,746	28,164	\$270,698,177	\$1,337	\$266,856,032	10,050	\$18,391,725

Application of Ideal System Criteria

Criteria Used	Population Category	MSA/PMSA/COUNTY	NAME	Airport	Population 25-Mile Radius		Cumulative Population Coverage		Oil & Gas Property Tax		Property Tax (in Millions\$)		Retail Sales	Employment	Agriculture Net Cash Return	
					22,335											
Population 10,000 to 25,000	Gray	Gray	Perry Letts Field													
Population 10,000 to 25,000	Milam	Milam	Cameron Municipal Airport	29,008	21,443	\$33,745,489	\$859	\$114,208,977						4,937	\$4,245,129	
Population 10,000 to 25,000	Milam	Milam	H.H. Coffield Regional	25,451												
Population 10,000 to 25,000	Hockley	Hockley	Levelland Municipal	33,467	31,095	\$1,122,052,704	\$2,341	\$199,768,992						10,771	\$24,232,148	
Population 10,000 to 25,000	Austin	Austin	Sealy (new)					\$0	\$0					0	\$0	
Population 10,000 to 25,000	Shelby	Shelby	Center Municipal	22,857	22,857	\$22,050,460	\$727	\$158,924,021						7,085	\$15,872,000	
Population 10,000 to 25,000	Panola	Panola	Panola County-Sharpe Field	25,664	15,871	\$658,232,067	\$1,322	\$86,230,051						4,486	\$1,926,348	
Population 10,000 to 25,000	Fayette	Fayette	Fayette Regional Air Center	23,581	15,796	\$195,248,567	\$1,215	\$183,708,426						5,677	\$4,213,704	
Population 10,000 to 25,000	Grimes	Grimes	Navasota Municipal	31,787	10,343	\$47,565,230	\$536	\$135,873,246						3084	\$1,308,662	
Population 10,000 to 25,000	Houston	Houston	Houston County	21,734	21,734	\$32,380,005	\$1,031	\$120,668,548						6637	\$2,236,350	
Population 10,000 to 25,000	Limestone	Limestone	Media-Limestone County	26,318	24,007	\$157,289,679	\$1,713	\$167,322,793						7536	\$2,245,557	
Population 10,000 to 25,000	Aransas	Aransas	Aransas County	45,415	20,854	\$29,152,270	\$927	\$169,454,678						5128	\$57,000	
Population 10,000 to 25,000	De Witt	De Witt	Cuero Municipal	14,296	13,695	\$27,815,436	\$572	\$86,238,348						4383	\$3,003,272	
Population 10,000 to 25,000	Calhoun	Calhoun	Calhoun County	74,925	6,787	\$17,717,546	\$1,106	\$43,564,212						3280	\$437,251	
Population 10,000 to 25,000	Lavaca	Lavaca	Hallettsville Municipal	19,032	21,426	\$130,679,326	\$1,152	\$148,843,244						6012	\$4,941,335	
Population 10,000 to 25,000	Lavaca	Lavaca	Yoakum Municipal	28,187												
Population 10,000 to 25,000	Kendall	Kendall	Kendall Co-Boerne(new)					\$0	\$0					0	\$0	
Population 10,000 to 25,000	Moore	Moore	Moore County	18,176	18,176	\$378,088,368	\$1,275	\$108,257,851						7615	\$37,679,368	
Population 10,000 to 25,000	Moore	Moore	Sunray(new)													
Population 10,000 to 25,000	Gillespie	Gillespie	Gillespie County	48,032	16,052	\$30,234	\$1,274	\$166,007,960						5,627	\$1,163,151	
Population 10,000 to 25,000	Tyler	Tyler	Tyler County	23,119	20,803	\$44,743,107	\$838	\$107,050,263						4,146	(\$955,379)	
Population 10,000 to 25,000	Willacy	Willacy	Charles R. Johnson	3,608	3,608	\$28,854,363	\$121	\$11,355,812						701	\$1,567,312	
Population 10,000 to 25,000	Colorado	Colorado	Robert R. Wells, JR	17,129	17,447	\$77,149,112	\$1,055	\$162,440,363						5,423	\$3,19,908	
Population 10,000 to 25,000	Colorado	Colorado	Eagle Lake	16,089												
Population 10,000 to 25,000	Eastland	Eastland	Cisco Municipal	20,899	24,546	\$57,949,615	\$847	\$158,173,333						6,976	\$8,421,979	
Population 10,000 to 25,000	Eastland	Eastland	Eastland Municipal	10,183				\$0	\$0					0	\$0	
Population 10,000 to 25,000	Deaf Smith	Deaf Smith	Hireford Municipal	20,202	20,202	\$3,294	\$860	\$160,268,932						7,946	\$65,904,302	
Population 10,000 to 25,000	Scurry	Scurry	Winston Field	25,170	25,170	\$217,666,047	\$1,099	\$153,237,080						8,379	\$7,636,795	
Population 10,000 to 25,000	San Jacinto	San Jacinto														
Population 10,000 to 25,000	Falls	Falls														
Population 10,000 to 25,000	Jones	Jones	Hamlin Municipal	16,463												
Population 10,000 to 25,000	Jones	Jones	Aldie Field	17,142												

Application of Ideal System Criteria

Criteria Used	Population Category	MSA/MPSA/COUNTY	NAME	Airport	Property Tax (In Million\$)			Retail Sales	Employment
					Population 25-Mile Radius	Cumulative Population Coverage	Oil & Gas Property Tax		
Population 10,000 to 25,000	Montague	Montague	Bowie Municipal	19,792	24,091	\$30,046,175	\$467	\$83,942,811	2,858
Population 10,000 to 25,000	Montague	Montague	Nocona Municipal	15,546					\$2,748,818
Population 10,000 to 25,000	Young	Young	Graham Municipal	12,903	20,693	\$70,162,316	\$732	\$143,036,630	6,538
Population 10,000 to 25,000	Young	Young	Olinay Municipal	9,765					\$5,862,965
Population 10,000 to 25,000	Freestone	Freestone	Teague Municipal	30,311	9,949	\$106,195,738	\$705	\$61,381,361	2,445
Population 10,000 to 25,000	Gonzales	Gonzales	Gonzales Municipal	25,746	8,494	\$4,877,044	\$403	\$54,414,024	2,610
Population 10,000 to 25,000	Nolan	Nolan	Avenger Field	16,939	17,811	\$86,223,636	\$825	\$134,004,173	5,927
Population 10,000 to 25,000	Lampasas	Lampasas	Lampasas	12,140	10,389	\$52,647	\$401	\$66,901,023	2,353
Population 10,000 to 25,000	Bosque	Bosque	Chilton Municipal/Senthower	20,636	12,224	\$1,106	\$603	\$44,994,621	2,523
Population 10,000 to 25,000	Pecos	Pecos	Fort Stockton-Pecos County	16,515	2,030,373,350	\$2,538	\$98,944,717	5038	\$4,793,000
Population 10,000 to 25,000	Willbarger	Willbarger	Wilbarger County	16,815	534,125,219	\$889	\$97,935,125	6248	\$5,699,305
Population 10,000 to 25,000	Frio	Frio	Dilley Airpark	6,762	7,799	\$16,884,485	\$326	\$34,043,804	1,923
Population 10,000 to 25,000	Frio	Frio	McKinley Field	13,561					\$3,702,998
Population 10,000 to 25,000	Robertson	Robertson	Hearne Municipal	91,921	13,515	\$89,591,498	\$1,170	\$50,907,413	3,034
Population 10,000 to 25,000	Reeves	Reeves	Pecos Municipal	15,474	\$153,115,930	\$486	\$76,073,405	5068	\$5,938,959
Population 10,000 to 25,000	Karnes	Karnes	Karnes County	21,139	19,465	\$84,430,374	\$1,155	\$176,558,757	10,599
Population 10,000 to 25,000	Lamb	Lamb	Littlefield Municipal	13,039	3,787	\$3,467,060	\$252	\$19,072,219	1,224
Population 10,000 to 25,000	Burleson	Burleson	Caldwell Municipal	41,866	8,738	\$72,360,184	\$516	\$61,253,793	2,244
Population 10,000 to 25,000	Dawson	Dawson	Lamesa Municipal	14,486	14,486	\$222,616,448	\$647	\$113,073,525	5,150
Population 10,000 to 25,000	Gaines	Gaines	Gaines County	24,303	24,303	\$2,395,039,110	\$3,398	\$167,964,062	7,907
Population 10,000 to 25,000	Red River	Red River	Clarksville-Red River County	13,208	10,968	\$11,551,469	\$378	\$56,362,840	2,714
Population 10,000 to 25,000	Andrews	Andrews	Andrews County	13,842	2,029	\$155,830,076	\$219	\$16,365,661	637
Population 10,000 to 25,000	Newton	Newton	Newton Municipal	23,115	3,686	\$10,275,219	\$191	\$18,996,388	574
Population 10,000 to 25,000	Lee	Lee	Giddings-Lee County	30,081	11,991	\$66,102,111	\$611	\$110,417,612	3,780
Population 10,000 to 25,000	Comanche	Comanche	Comanche County-City	17,157	3,871	\$745,863	\$164	\$26,800,127	980
Population 10,000 to 25,000	Leon	Leon	Leon County(new)			\$0	\$0	0	\$0
Population 10,000 to 25,000	Duval	Duval	Duval-Freer			\$95,008,658	\$370	\$13,617,764	1,338
Population 10,000 to 25,000	Morris	Morris	Greater Morris County	50,032	20,419	\$22,071	\$142	\$12,883,470	1,345

Application of Ideal System Criteria

Criteria Used	Population Category	MSA/PMSA/COUNTY	NAME	Airport	Cumulative Population 25-Mile Radius		Oil & Gas Property Tax (In Millions\$)	Property Tax (In Millions\$)	Retail Sales	Employment	
					Population	25-Mile Radius					
Population 10,000 to 25,000	Terry	Terry County		16,518	15,688	\$158,135,455	\$723	\$110,389,779	5,084	\$17,108,660	
Population 10,000 to 25,000	Ward	Roy Hurd Memorial		15,609	11,116	\$276,165,362	\$645	\$56,150,139	3,137	\$316,684	
Population 10,000 to 25,000	Llano	Llano Municipal		11,493	11,493	\$214,232	\$1,247	\$78,285,216	3,232	\$1,157,730	
Population 10,000 to 25,000	Trinity	Groveton-Trinity County		18,935	12,539	\$25,262,165	\$558	\$72,775,433	2,487	\$278,064	
Population 10,000 to 25,000	Callahan						\$0	\$0	0	\$0	
Population 10,000 to 25,000	Madison	Madisonville Municipal		20,388	10,354	\$42,986,646	\$548	\$58,484,192	3,209	\$3,154,655	
Population 10,000 to 25,000	Zavala	Crystal City Municipal		16,312	16,123	\$34,694,078	\$593	\$45,936,590	3,130	\$4,650,091	
Population 10,000 to 25,000	Camp						\$0	\$0	0	\$0	
Population 10,000 to 25,000	Runnels	Bruce Field		11,946	12,330	\$27,013,773	\$478	\$73,399,256	3,974	\$4,086,216	
Population 10,000 to 25,000	Dimmit	Winters Municipal		11,519							
Population 10,000 to 25,000	Zapata	Zapata County		18,858	3,678	\$6,179,698	\$107	\$9,968,904	526	\$45,571	
Population 10,000 to 25,000	Sabine	Pineyland Municipal		10,662	10,662	\$662,371,610	\$965	\$39,642,802	2,255	\$1,842,000	
Population 10,000 to 25,000	Clay						\$0	\$0	0	\$0	
Population 10,000 to 25,000	Live Oak	Live Oak County		9,911	9,911	\$94,921,517	\$885	\$79,975,879	2,379	\$500,434	
Population 10,000 to 25,000	Marion	Cypress River		46,757	6,466	\$10,050,007	\$265	\$33,850,842	1,384	\$2,470,070	
Population 10,000 to 25,000	Farmer	Berger Airpark		24,322	7,604	\$0	\$350	\$34,801,053	3,510	\$29,260,468	
Ret. Sales BELOW 10,000	Brewster	Alpine-Caspars Municipal		10,358	10,727	\$135,225	\$538	\$69,242,866	3,622	\$3,104,161	
Ret. Sales BELOW 10,000	Browster	Lajitas	Ochiltree	359	369	\$9,967	\$169,220,431	\$588	\$71,863,779	3,901	\$18,409,765
Ret. Sales BELOW 10,000	Ochiltree	Perryton Ochiltree County		10,341	9,102	\$127,106,999	\$483	\$62,047,352	2,988	\$1,661,061	
Ret. Sales BELOW 10,000	Stephens	Stephens County		11,109	10,364	\$10,218,984	\$136	\$23,021,188	612	\$2,767,090	
Ret. Sales BELOW 10,000	Haskell	Haskell Municipal		4,156	4,013	\$386,912,902	\$701	\$60,933,735	1,411	\$13,632,034	
Ret. Sales BELOW 10,000	Hemphill	Hemphill County		7,438	7,438	\$73,249	\$180	\$63,203,777	2,311	\$5,608,749	
Ret. Sales BELOW 10,000	Childress	Childress Municipal		13,038	12,384	\$4,354,627	\$633	\$65,430,571	4,445	\$21,117,528	
Ret. Sales BELOW 10,000	Bailey	Muleshoe Municipal					\$0	\$0	0	\$0	
Ret. Sales BELOW 10,000	Dallam	Denver City		11,206	\$1,215,632,234	\$1,775	\$68,913,987	3,835	\$13,184,749		
Ret. Sales BELOW 10,000	McCulloch	Curtis Field		8,466	8,468	\$4,140,766	\$439	\$55,600,383	2,632	\$3,243,708	
Ret. Sales BELOW 10,000	Castro	Dimmit Municipal		8,835	6,988	\$0	\$408	\$68,280,635	0	\$0	
Ret. Sales BELOW 10,000	Coleman	Franklin County		19,518	4,823	\$11,130,212	\$196	\$35,972,847	1,384	\$2,936,810	
Ret. Sales BELOW 10,000	Crosby	Swisher	City of Tula/Swisher County Municipal	11,291	10,324	\$8,753	\$405	\$60,360,971	2,484	\$26,477,140	
Ret. Sales BELOW 10,000	Brooks	Brookes County		12,864	2,963	\$6,972,144	\$492	\$42,544,970	1,675	\$1,661,660	
Ret. Sales BELOW 10,000	Rafugio	Rooke Field		24,907	4,078	\$7,827,588	\$134	\$9,377,859	425	\$673,208	
Ret. Sales BELOW 10,000	Kimble	Kimble County					\$0	\$0			
Ret. Sales BELOW 10,000	Floyd	Floydada Municipal		7,680	5,070	\$16,356	\$204	\$26,840,581	1,634	\$3,392,804	
Ret. Sales BELOW 10,000	Hamilton	Hamilton Municipal		12,512	7,844	\$40,9,135	\$429	\$43,197,893	2,221	\$11,873,127	
Ret. Sales BELOW 10,000	San Augustine	San Augustine County		12,570	2,576	\$2,478,097	\$106	\$13,034,462	621	\$248,374	

Application of Ideal System Criteria

Criteria Used	Population Category	MSA/PMSA/County	NAME	Airport	Cumulative Population Coverage		Oil & Gas Property Tax (in Millions\$)		Retail Sales		Employment	
					25-Mile Radius	Population	Property Tax	Retail Sales	Population	Oil & Gas Property Tax (in Millions\$)	Retail Sales	Employment
Ret. Sales	BELOW 10,000	Mitchell	Colorado City	25,660	7,016	\$72,366,867	\$392	\$37,041,419	1,839	\$3,827,925	\$3,827,925	
Ret. Sales	BELOW 10,000	Culberson	Culberson County	2,920	2,920	\$23,926,470	\$240	\$34,978,961	1038	\$220,980	\$220,980	
Ret. Sales	BELOW 10,000	Martin	Stanton Municipal	66,815	1,245	\$156,117,427	\$288	\$3,275,086	313	\$5,445,418	\$5,445,418	
Ret. Sales	BELOW 10,000	Winkler	Winkler County	8,978	8,978	\$347,551,191	\$592	\$40,921,497	2,422	\$709,964	\$709,964	
Ret. Sales	BELOW 10,000	Jim Hogg	Jim Hogg County	5,577	5,577	\$64,627,517	\$414	\$36,373,420	1,457	(\$195,750)	(\$195,750)	
Ret. Sales	BELOW 10,000	Wheeler	Shamrock Municipal	4,862	4,231	\$124,515,469	\$310	\$31,091,532	1,420	\$7,253,871	\$7,253,871	
Ret. Sales	BELOW 10,000	Wheeler	Wheeler Municipal	6,057	6,057	\$0	\$0	\$0	0	0	0	
Oil & Gas	BELOW 10,000	Crane	Crane County	6,781	6,781	\$853,701,341	\$1,161	\$34,904,505	2,417	\$1,183,615	\$1,183,615	
Oil & Gas	BELOW 10,000	Kent	Kent County	1,088	1,088	\$506,146,325	\$693	\$11,603,788	511	\$1,526,952	\$1,526,952	
Oil & Gas	BELOW 10,000	Upton	Upton County	7,353	7,353	\$10,283,879	\$15	\$396,859	28	\$35,134	\$35,134	
Oil & Gas	BELOW 10,000	Crockett	Crockett	3,984	3,984	\$334,052,334	\$686	\$27,881,260	1,327	\$551,545	\$551,545	
Oil & Gas	BELOW 10,000	Carson	Panhandle-Carson County	22,390	301	\$10,335,540	\$28	\$1,102,433	194	\$352,636	\$352,636	
Oil & Gas	BELOW 10,000	Reagan	Reagan County	4,246	4,059	\$207,924,527	\$401	\$27,953,355	1,128	\$2,014,274	\$2,014,274	
Oil & Gas	BELOW 10,000	Sutton	Sutton	6,363	6,353	\$232,658,587	\$730	\$30,249,206	2,221	\$1,661,535	\$1,661,535	
Oil & Gas	BELOW 10,000	Glasscock	Glasscock	0	0	\$0	\$0	\$0	0	0	0	
Oil & Gas	BELOW 10,000	Garza	Garza	5,264	5,264	\$192,453,028	\$380	\$26,325,418	1,212	\$4,368,628	\$4,368,628	
Oil & Gas	BELOW 10,000	Borden	Borden	0	0	\$0	\$0	\$0	0	0	0	
Oil & Gas	BELOW 10,000	Cochran	Cochran County	4,372	3,454	\$143,849,606	\$284	\$18,439,168	915	\$3,141,573	\$3,141,573	
Oil & Gas	BELOW 10,000	Lipscomb	Follett/Lipscomb County	2,240	1,227	\$65,569,028	\$133	\$3,994,119	311	\$1,121,170	\$1,121,170	
Oil & Gas	BELOW 10,000	Lipscomb	Higgins-Lipscomb County	1,183	0	\$0	\$0	\$0	0	0	0	
Oil & Gas	BELOW 10,000	Sherman	Sherman	2,941	2,941	\$157,878,866	\$298	\$12,746,918	869	\$34,049,295	\$34,049,295	
Oil & Gas	BELOW 10,000	McMullen	McMullen	0	0	\$0	\$0	\$0	0	0	0	
Oil & Gas	BELOW 10,000	Terrell	Terrell	502	502	\$67,766,128	\$112	\$1,361,919	101	(\$90,800)	(\$90,800)	
Oil & Gas	BELOW 10,000	Iron	Iron	0	0	\$0	\$0	\$0	0	0	0	
Oil & Gas	BELOW 10,000	King	King	0	0	\$0	\$0	\$0	0	0	0	
Oil & Gas	BELOW 10,000	Hansford	Hansford	5,146	3,981	\$133,562,655	\$530	\$48,104,401	2,615	\$30,733,394	\$30,733,394	
Oil & Gas	BELOW 10,000	Hansford	Hansford	5,960	5,960	\$0	\$0	\$0	0	0	0	
Oil & Gas	BELOW 10,000	Sterling	Sterling	0	0	\$0	\$0	\$0	0	0	0	
Oil & Gas	BELOW 10,000	Roberts	Roberts	1,547	52	\$6,650,407	\$12	\$116,762	11	\$158,415	\$158,415	
Oil & Gas	BELOW 10,000	Kenedy	Kenedy	0	0	\$0	\$0	\$0	0	0	0	
Oil & Gas	BELOW 10,000	Hardeman	Hardeman	5,133	5,133	\$24,059,204	\$70	\$4,788,211	317	\$272,108	\$272,108	
Oil & Gas	BELOW 10,000	Quaran	Quaran Municipal	0	0	\$0	\$0	\$0	0	0	0	
Oil & Gas	BELOW 10,000	Gruver	Gruver Municipal	0	0	\$0	\$0	\$0	0	0	0	
Oil & Gas	BELOW 10,000	Spearmen	Spearmen Municipal	0	0	\$0	\$0	\$0	0	0	0	
Oil & Gas	BELOW 10,000	Terrell	Terrell County	0	0	\$0	\$0	\$0	0	0	0	
Oil & Gas	BELOW 10,000	Robert	Miami-Roberts County	0	0	\$0	\$0	\$0	0	0	0	
Oil & Gas	BELOW 10,000	Lee	Lee	0	0	\$0	\$0	\$0	0	0	0	
Oil & Gas	BELOW 10,000	Loving	Loving	0	0	\$0	\$0	\$0	0	0	0	
Oil & Gas	BELOW 10,000	Jack	Jackstonoro Municipal	10,871	1,353	\$12,248,425	\$96	\$4,744,570	343	\$404,768	\$404,768	
Oil & Gas	BELOW 10,000	Stonewall	Stonewall County	1,652	132	\$5,550,816	\$16	\$871,485	54	\$188,168	\$188,168	
Oil & Gas	BELOW 10,000	Coke	Coke	2,974	2,974	\$52,119,385	\$244	\$21,396,656	845	\$1,035,057	\$1,035,057	
Oil & Gas	BELOW 10,000	Goliad	Goliad	0	0	\$0	\$0	\$0	0	0	0	
Oil & Gas	BELOW 10,000	Schleicher	Schleicher	6,126	506	\$8,215,559	\$50	\$1,282,805	122	\$158,688	\$158,688	
Oil & Gas	BELOW 10,000	Edwards	Edwards County	2,503	2,503	\$41,589,328	\$341	\$8,366,653	310	(\$263,018)	(\$263,018)	
Oil & Gas	BELOW 10,000	Throckmorton	Throckmorton	0	0	\$0	\$0	\$0	0	0	0	
Agriculture	BELOW 10,000	Hartley	Hartley	10,660	9,967	\$29,441,158	\$734	\$77,790,091	4,005	\$93,367,516	\$93,367,516	
Agriculture	BELOW 10,000	Lynn	T-bar	6,948	1,485	\$1,125,381	\$69	\$5,612,876	382	\$2,755,870	\$2,755,870	
Agriculture	BELOW 10,000	Armstrong	Armstrong	0	0	\$0	\$0	\$0	0	0	0	
Agriculture	BELOW 10,000	Fisher	Fisher	18,061	563	\$4,671,576	\$35	\$1,450,142	117	\$702,720	\$702,720	
Agriculture	BELOW 10,000	Oldham	Oldham County	3,089	2,097	\$2,961,347	\$123	\$9,871,876	784	\$5,149,108	\$5,149,108	
Agriculture	BELOW 10,000	Hall	Memphis Municipal	4,668	3,314	\$259,799	\$128	\$3,944,553	711	\$3,837,933	\$3,837,933	
Agriculture	BELOW 10,000	San Saba	San Saba	0	0	\$0	\$0	\$0	0	0	0	
Agriculture	BELOW 10,000	Hudspeth	Hudspeth	995	2,333	\$1,111,247	\$206	\$5,875,521	487	\$3,318,904	\$3,318,904	
Agriculture	BELOW 10,000	Concho	Concho	1,338	0	\$0	\$0	\$0	0	0	0	
Agriculture	BELOW 10,000	Rains	Rains County	56,371	985	\$3,912,431	\$38	\$4,794,661	167	\$541,464	\$541,464	
Agriculture	BELOW 10,000	Baylor	Baylor	8,900	1,499	\$582	\$582	\$33,959,055	2,263	\$3,663,231	\$3,663,231	
Agriculture	BELOW 10,000	Mason	Mason County	4,905	3,211	\$420,590	\$264	\$14,402,593	1,398	\$4,360,494	\$4,360,494	
Agriculture	BELOW 10,000	Knox	Knox City Municipal	8,318	3,161	\$25,040,596	\$189	\$31,142,399	1,119	\$282,123	\$282,123	
Agriculture	BELOW 10,000	Knox	Munday Municipal	8,697	0	\$0	\$0	\$0	0	0	0	
Agriculture	BELOW 10,000	Dickens	Dickens	2,678	1,651	\$25,586,468	\$120	\$7,461,530	467	\$2,345,583	\$2,345,583	

Application of Ideal System Criteria

Criteria Used	Population Category	MSA/MSA/County	NAME	Airport	Cumulative Population Coverage		Property Tax (In Millions\$)	Retail Sales	Employment	Agriculture Net Cash Return
					Population 25-Mile Radius	Oil & Gas Property Tax				
BELOW 10,000	Presidio	Presidio	Marfa Municipal	4,071	3,946	\$2,118	\$14,143,919	662	\$1,628,710	
BELOW 10,000	Presidio	Presidio	Presidio Lely International	3,766	\$0	\$0	\$0	0	\$0	
BELOW 10,000	Donley	Donley	Claarendon Municipal	3,677	2,650	\$92,769	\$12,863,900	673	\$2,406,645	
BELOW 10,000	Briscoe	Briscoe			\$0	\$0	\$0	0	\$0	
BELOW 10,000	Shackelford	Shackelford	Albany Municipal	9,767	2,854	\$32,027,208	\$215	\$10,656,272	725	\$2,184,468
BELOW 10,000	Cottle	Cottle	Dan E. Richards Municipal	2,242	2,153	\$6,012,591	\$63	\$5,691,556	252	\$1,196,628
BELOW 10,000	Collingsworth	Collingsworth	Marian Airpark		\$2,324,357	\$47	\$4,901,394	359	\$952,661	
BELOW 10,000	Motley	Motley			\$0	\$0	\$0	0	\$0	
BELOW 10,000	Jeff Davis	Jeff Davis			\$0	\$0	\$0	0	\$0	
BELOW 10,000	Menard	Menard	Menard County	4,229	4,229	\$23,016,871	\$406	\$19,007,899	1,086	\$3,706,568
BELOW 10,000	Blanco	Blanco			\$0	\$0	\$0	0	\$0	
BELOW 10,000	Foard	Foard	Foard County	5,669	1,595	\$4,693,827	\$83	\$4,712,232	375	\$762,048
BELOW 10,000	Real	Real	Real County		\$135,749	\$381	\$23,051,945	1,029	\$898,370	
BELOW 10,000	Delta	Delta			\$0	\$0	\$0	0	\$0	
BELOW 10,000	La Salle	La Salle	Cotulla-La Salle County	7,658	1,548	\$6,173,760	\$99	\$6,306,748	313	\$122,978
BELOW 10,000	Somervell	Somervell			\$0	\$0	\$0	0	\$0	
BELOW 10,000	Kinney	Kinney			\$0	\$0	\$0	0	\$0	
BELOW 10,000	Mills	Mills	Mills County (New)			\$0	\$0	\$0	0	\$0
	TOTAL				18,815,666	\$27,807,774,689	\$738,597	\$203,539,253,409	7,657,717	\$1,391,729,551



**Appendix B**  
**Application of Ideal System Criteria - Cumulative**  
**Percentages of State totals**



Application of Ideal System Criteria - Cumulative Percentages of State Totals

Criteria Used	Population Category	MSA/PLSS/County	NAME	Airport	Population 25-Mile Radius		Percent of State Population Coverage		Percent of State Oil & Gas Tax		Percent of State Prop. Tax		Percent of State Retail Sales		Percent of State Employment		Percent of State Agric.		
					0	4,012,397	21%	4%	23%	24%	24%	2%							
Population 1 Million +	Houston	Harris	East Grand Parkway (New)	David Wayne Hooks Memorial	407,543														
Population 1 Million +	Harris	Harris	Houston Field		1,987,813														
Population 1 Million +	Harris	Harris	Houston Intercontinental		331,122														
Population 1 Million +	Harris	Harris	West Houston		1,351,756														
Population 1 Million +	Harris	Harris	Houston Westside (New)		0														
Population 1 Million +	Harris	Harris	William P. Hobby		2,549,833														
Population 1 Million +	Harris	Harris	La Porte Municipal		1,037,926														
Population 1 Million +	Chambers	Chambers County			28,814														
Population 1 Million +	Chambers	Chambers County-Winona Stowell			22,092														
Population 1 Million +	Fort Bend	Sugar Land Municipal			1,516,110														
Population 1 Million +	Fort Bend	Houston Southwest			1,384,887														
Population 1 Million +	Liberty	Cleveland Municipal			32,718														
Population 1 Million +	Liberty	Liberty Municipal			44,052														
Population 1 Million +	Montgomery	Montgomery County			230,012														
Population 1 Million +	Walker																		
Population 1 Million +	Dallas	Addison			2,400,534	3,303,354	38%	5%	43%	46%	46%	48%							3%
Population 1 Million +	Dallas	Dallas Love Field			1,950,172														
Population 1 Million +	Dallas	Redbird			2,755,405														
Population 1 Million +	Dallas	Lancaster			1,601,393														
Population 1 Million +	Dallas	Phil L Hudson Municipal			429,505														
Population 1 Million +	Collin	McKinney Municipal			412,101														
Population 1 Million +	Denton	Denton Municipal			372,824														
Population 1 Million +	Ellis	Ennis Municipal			78,483														
Population 1 Million +	Ellis	Midlothian/Waxahachie Municipal			264,124														
Population 1 Million +	Henderson	Athens Municipal			87,671														
Population 1 Million +	Hunt	Caddo Mills Municipal			56,893														
Population 1 Million +	Hunt	Commerce Municipal			55,624														
Population 1 Million +	Hunt	Mojos			83,172														
Population 1 Million +	Kaufman	Terrell Municipal			72,728														
Population 1 Million +	Rockwall	Rockwall Municipal			485,211														
Population 1 Million +	Rockwall																		
Population 1 Million +	FT. WORTH/HARLINGON MSA	Tarrant	Arlington Municipal		1,921,165	1,349,155	45%	5%	44%	48%	48%	47%							4%
Population 1 Million +	Tarrant	Tarrant	Dallas-Fort Worth International		2,913,268														
Population 1 Million +	Tarrant	Ft. Worth Alliance			1,547,966														
Population 1 Million +	Tarrant	Fort Worth Meacham			1,327,538														
Population 1 Million +	Tarrant	Fort Worth Spinks			1,072,228														
Population 1 Million +	Tarrant	Fort Worth Carswell			1,220,717														
Population 1 Million +	Tarrant	Grand Prairie Municipal			2,347,638														
Population 1 Million +	Hood	Granbury Municipal			38,911														
Population 1 Million +	Johnson	Cleburne Municipal			117,589														
Population 1 Million +	Parker	Mineral Wells			63,109														
Population 1 Million +	Parker	Weatherford (New)			0														
Population 1 Million +	Bexar	San Antonio International			1,346,131	1,488,741	53%	5%	50%	55%	55%	55%							
Population 1 Million +	Bexar	Stinson Municipal			1,301,291														
Population 1 Million +	Comal																		
Population 1 Million +	Guadalupe	New Braunfels Municipal			166,752														
Population 1 Million +	Wilson																		
Population 1 Million +	AUSTIN-SAN MARCOS MSA	Travis	Austin (New)		0	984,726	58%	6%	57%	61%	61%	61%							5%
Population 1 Million +	Travis	Austin Executive Airport			740,307														
Population 1 Million +	Robert Mueller				779,955														
Population 1 Million +	Eastrop	Smithville Municipal			51,946														
Population 1 Million +	Caldwell	Lockhart Municipal			31,266														

Application of Ideal System Criteria - Cumulative Percentages of State Totals

Criteria Used	Population Category	MSA/PMSA/COUNTY	NAME	Airport	Population 25-Mile Radius	Cumulative Population Coverage	Percent of State Population	Percent of State Oil & Gas Tax	Percent of State Prop. Tax	Percent of State Retail Sales	Percent of State Employment	Percent of State Agric.	Percent of Net Cash Return
Population 1 Million +		Caldwell	The Carter Memorial	San Marcos Municipal	133,847	31,218							
Population 1 Million +		Caldwell	Hays										
Population 1 Million +		Williamson	Georgetown Municipal		159,106								
Population 1 Million +		Williamson	Taylor Municipal		105,313								
Population 250,000 to 1,000,000	El PASO MSA	El Paso	El Paso International		661,477	659,129	62%	6%	59%	64%	64%	6%	
Population 250,000 to 1,000,000	El PASO	El Paso	West Texas		654,553								
Population 250,000 to 1,000,000	Fabens				363,497								
Population 250,000 to 1,000,000	Hidalgo	Edinburg Rio Grande Valley Regional			415,116	567,157	65%	8%	60%	65%	66%	8%	
Population 250,000 to 1,000,000	Hidalgo	McAllen Miller International			417,675								
Population 250,000 to 1,000,000	Hidalgo	Mid Valley			388,630								
Population 250,000 to 1,000,000	Hardin	Hawthorne Field			154,918	363,942	67%	8%	63%	67%	67%	8%	
Population 250,000 to 1,000,000	Jefferson	Beaumont Municipal			297,666								
Population 250,000 to 1,000,000	Jefferson	Jefferson County			287,965								
Population 250,000 to 1,000,000	Orange	Orange County			358,238								
Population 250,000 to 1,000,000	Nueces	Bishop Municipal			55,716	375,817	69%	10%	64%	68%	69%	9%	
Population 250,000 to 1,000,000	Nueces	Corpus Christi International			350,836								
Population 250,000 to 1,000,000	Nueces	Mustang Beach			320,829								
Population 250,000 to 1,000,000	Nueces	Nueces County			369,301								
Population 250,000 to 1,000,000	San Patricio	Ariansas Pass			319,378								
Population 250,000 to 1,000,000	San Patricio	T.P. McCampbell			320,829								
Population 250,000 to 1,000,000	San Patricio	San Patricio County			37,693								
Population 250,000 to 1,000,000	BROWN-HARL-SAN BEN. MSA	Brownsville/South Padre Island Int'l.			204,523	248,235	70%	10%	65%	69%	70%	9%	
Population 250,000 to 1,000,000	Cameron	Rio Grande Valley International			248,235								
Population 250,000 to 1,000,000	Cameron	Port Isabel-Cameron County			213,617								
Population 250,000 to 1,000,000	Cameron	San Benito Municipal			315,289								
Population 250,000 to 1,000,000	KILLEEN-TEMPLE MSA	Killeen Municipal			185,761	321,677	72%	10%	66%	71%	71%	10%	
Population 250,000 to 1,000,000	Bell	Draughan Miller Municipal			242,229								
Population 250,000 to 1,000,000	Bell	Gatesville City-County			42,228								
Population 100,000 to 150,000	GALVESTON-TEXAS CITY PMSA	Galveston Municipal/Schleses Field			241,981	133,470	72%	10%	67%	71%	72%	10%	
Population 100,000 to 150,000	Galveston	Houston Gulf			550,489								
Population 100,000 to 150,000	Odessa-Midland MSA	Ector			225,565	241,053	73%	16%	68%	73%	73%	10%	
Population 100,000 to 150,000	Midland	Midland Airpark			212,563								
Population 100,000 to 150,000	Midland	Midland International			216,481								
Population 100,000 to 150,000	LUBBOCK MSA	Lubbock International			232,974	235,243	75%	17%	69%	74%	74%	11%	
Population 100,000 to 150,000	Lubbock	Lubbock Municipal			224,071								
Population 100,000 to 150,000	BRAZORIA PMSA	Brazoria County			219,838	133,638	76%	17%	69%	74%	75%	11%	
Population 100,000 to 150,000	Brazoria	Clover Field			2,436,823								
Population 100,000 to 150,000	AMARILLO MSA	Potter			202,834	207,985	77%	17%	70%	75%	76%	14%	
Population 100,000 to 150,000	Randall	Tredewind			203,277								
Population 100,000 to 150,000	LONGVIEW-MARSHALL MSA	Gregg	Gladewater Municipal		87,756	272,531	78%	22%	71%	76%	77%	13%	
Population 100,000 to 150,000	Gregg	Gregg County			183,380								
Population 100,000 to 150,000	Harrison	Harrison County			60,249								
Population 100,000 to 150,000	Upshur	Gilmer-Upshur County			83,534								
Population 100,000 to 150,000													

Application of ideal System Criteria - Cumulative Percentages of State Totals

Criteria Used	Population Category	MSA/MSA+COUNTY	NAME	Airport	Population 25-Mile Radius	Cumulative Population Coverage	Percent of State Population	Percent of State Oli & Gas Tax	Percent of State Prop. Tax	Percent of State Retail Sales	Percent of State Employment	Percent of State Agric.	Percent of Net Cash Return
Population 100,000 to 250,000	WACO MSA	McLennan	McGregor Municipal	190,258	186,001	79%	22%	71%	77%	78%	78%	15%	
Population 100,000 to 250,000	WACO MSA	McLennan	TSTC Waco	197,106									
Population 100,000 to 250,000	WACO MSA	McLennan	Waco Regional	205,081									
Population 100,000 to 250,000	LAREDO MSA	Webb	Laredo International	177,147	177,147	80%	24%	72%	78%	78%	78%	15%	
Population 100,000 to 250,000	TYLER MSA	Smith	Tyler Pounds Field	186,153	165,144	81%	24%	73%	79%	79%	79%	15%	
Population 100,000 to 250,000	BRYAN-COLLEGE STATION MSA	Brazos	Coulter Field	146,487	162,401	82%	25%	74%	79%	80%	80%	16%	
Population 100,000 to 250,000	BRAZOS	Brazos	Easterwood Field	158,037									
Population 100,000 to 250,000	WICHITA FALLS MSA	Archer	Kickapoo Downtown Airport	140,076									
Population 100,000 to 250,000	WICHITA	Wichita	Sheppard AFB/Wichita Falls Municipal	141,976									
Population 100,000 to 250,000	WICHITA	Wichita											
Population 100,000 to 250,000	ABILENE MSA	Taylor	Abilene Regional	136,883	136,883	83%	26%	75%	81%	81%	81%	17%	
Population 100,000 to 250,000	TEXARKANA MSA	Bowie	New Boston (New)	85,080	85,080	83%	26%	75%	81%	82%	82%	18%	
Population 100,000 to 250,000	BOWIE	Bowie	Texarkana Regional-Werb Field	85,080									
Population 100,000 to 250,000	MILLER, CO, AK												
Population 100,000 to 250,000	SAN ANGELO MSA	Tom Green	Mathis Field	105,826	105,826	84%	26%	75%	81%	82%	82%	18%	
Population 100,000 to 250,000	SHERMAN-DENISON MSA	Grayson	Sherman Municipal	95,307	101,644	85%	26%	76%	82%	83%	83%	18%	
Population 100,000 to 250,000	GRAYSON	Grayson	Grayson County	100,611									
Population 50,000 to 100,000	VICTORIA MSA	Victoria	Victoria Regional	88,435	88,435	85%	26%	76%	82%	83%	83%	19%	
Population 50,000 to 100,000	ANGELINA	Angelina	Angelina County	75,924	75,924	85%	26%	77%	83%	84%	84%	19%	
Population 50,000 to 100,000	NACOGDOCHES	Nacogdoches	A.L.Mangham Jr. Regional	105,032	59,321	86%	27%	77%	83%	84%	84%	20%	
Population 50,000 to 100,000	WALKER	Walker	Huntsville Municipal	56,253	55,211	86%	27%	77%	83%	84%	84%	20%	
Population 50,000 to 100,000	ANDERSON	Anderson	Palestine Municipal	50,833	44,522	86%	27%	77%	85%	84%	84%	20%	
Population 25,000 to 50,000	STAR	Star	Starr County	46,527	43,610	86%	28%	77%	85%	85%	85%	21%	
Population 25,000 to 50,000	LAMAR	Lamar	Cox Field	52,008	51,153	87%	28%	77%	85%	84%	84%	22%	
Population 25,000 to 50,000	RUSK	Rusk	Rusk County	68,038	20,507	87%	28%	77%	85%	84%	84%	22%	
Population 25,000 to 50,000	MAVERICK	Maverick	Eagle Pass (New)										
Population 25,000 to 50,000	CHEROKEE	Cherokee	Cherokee County	74,518	29,349	87%	28%	78%	85%	85%	85%	23%	
Population 25,000 to 50,000	VAL VERDE	Val Verde	Del Rio International	35,972	35,972	87%	28%	78%	85%	85%	85%	23%	
Population 25,000 to 50,000	NAVARRO	Navarro	C. David Campbell Field-Corsicana M	45,426	43,125	87%	28%	78%	85%	85%	85%	23%	
Population 25,000 to 50,000	KENT	Kent	Kerrville Municipal/Louis Schreiner Fld	38,636	38,636	88%	28%	78%	85%	85%	85%	23%	
Population 25,000 to 50,000	VAN ZANDT	Van Zandt	Wills Point Municipal	44,998	13,154	88%	29%	78%	85%	85%	85%	23%	
Population 25,000 to 50,000	POLK	Polk	Livingston Municipal	40,544	34,583	88%	29%	78%	85%	85%	85%	23%	
Population 25,000 to 50,000	WHARTON	Wharton	Wharton Municipal	51,616	50,747	88%	30%	79%	85%	85%	85%	23%	
Population 25,000 to 50,000													

Application of Ideal System Criteria - Cumulative Percentages of State Totals

Criteria Used	Population Category	MSA/Metropolitan County	Name	Airport	Population 25-Mile Radius	Cumulative Population Coverage	Percent of State Population	Percent of State Oil & Gas Tax	Percent of State Prop. Tax	Percent of State Retail Sales	Percent of State Employment	Percent of State Agric.	Percent of Net Cash Return
Population 25,000 to 50,000	Wise	Wise	Bridgeport Municipal	21,878	42,627	88%	30%	75%	86%	85%	86%	25%	
Population 25,000 to 50,000	Wise	Wise	Decatur Municipal	39,462									
Population 25,000 to 50,000	Jim Wells	Jim Wells	Alice International	51,455	32,660	89%	31%	79%	86%	86%	86%	25%	
Population 25,000 to 50,000	Matagorda	Matagorda	Bay City Municipal	45,986	41,188	89%	31%	80%	86%	86%	86%	26%	
Population 25,000 to 50,000	Matagorda	Matagorda	Palacios Municipal	20,153									
Population 25,000 to 50,000	Brown	Brown	Brownwood Municipal	38,303	38,303	89%	31%	80%	86%	86%	86%	26%	
Population 25,000 to 50,000	Hale	Hale	Abenathy Municipal	122,401	39,660	89%	31%	80%	87%	86%	86%	27%	
Population 25,000 to 50,000	Hale	Hale	Hale County	34,267									
Population 25,000 to 50,000	Atascosa	Atascosa	Pleasanton Municipal	30,502	25,473	89%	31%	80%	87%	86%	86%	28%	
Population 25,000 to 50,000	Jasper	Jasper	Jasper County-Bell Field	34,684	48,035	90%	31%	80%	87%	86%	86%	27%	
Population 25,000 to 50,000	Jasper	Jasper	Kirbyville	23,132									
Population 25,000 to 50,000	Medina	Medina	Castroville Municipal	1,186,758	53,310	90%	31%	80%	87%	86%	86%	28%	
Population 25,000 to 50,000	Medina	Medina	Devine Municipal	23,242									
Population 25,000 to 50,000	Medina	Medina	Hondo Municipal	23,576									
Population 25,000 to 50,000	Wood	Wood	Mineralia-Quitman	59,165	50,104	90%	32%	81%	88%	87%	87%	29%	
Population 25,000 to 50,000	Wood	Wood	Winnsboro Municipal	32,481									
Population 25,000 to 50,000	Howard	Howard	Big Spring McMahon-Wrinkle	37,401	34,834	90%	34%	81%	88%	87%	87%	30%	
Population 25,000 to 50,000	Cooke	Cooke	Gainesville Municipal	45,147	38,526	90%	34%	81%	88%	87%	87%	30%	
Population 25,000 to 50,000	Kleberg	Kleberg	Kleberg County	62,921	5,659	90%	34%	81%	88%	87%	87%	30%	
Population 25,000 to 50,000	Hopkins	Hopkins	Sulphur Springs Municipal	42,975	3,618	90%	34%	81%	88%	87%	87%	30%	
Population 25,000 to 50,000	Erath	Erath	Dublin Municipal	37,236	40,515	91%	34%	81%	88%	87%	87%	33%	
Population 25,000 to 50,000	Erath	Erath	Clark Field Municipal	37,481									
Population 25,000 to 50,000	Cass	Cass	Atlanta Municipal	31,080	31,080	91%	34%	81%	88%	87%	87%	34%	
Population 25,000 to 50,000	Hill	Hill	Hillsboro Municipal	34,152	19,131	91%	34%	82%	88%	87%	87%	34%	
Population 25,000 to 50,000	Burnet	Burnet	Burnet Municipal Kate Craddock Field	35,878	91%	34%	82%	88%	87%	87%	87%	34%	
Population 25,000 to 50,000	Washington	Washington	Brenham Municipal	56,485	53,733	91%	35%	82%	89%	88%	88%	34%	
Population 25,000 to 50,000	Bee	Bee	Beeville Municipal	25,356	22,687	92%	35%	82%	89%	88%	88%	34%	
Population 25,000 to 50,000	Fannin	Fannin	Jones Field	31,760	24,462	92%	35%	82%	89%	88%	88%	34%	
Population 25,000 to 50,000	Palo Pinto	Palo Pinto	Possum Kingdom	6,308	3,098	92%	35%	82%	89%	88%	88%	34%	
Population 25,000 to 50,000	Titus	Titus	Mount Pleasant Municipal	60,777	46,208	92%	35%	83%	89%	88%	88%	34%	
Population 25,000 to 50,000	Hutchinson	Hutchinson	Hutchinson County	30,385	30,365	92%	36%	83%	89%	88%	88%	34%	
Population 25,000 to 50,000	Uvalde	Uvalde	Gerner Field	26,985	24,263	92%	36%	83%	89%	88%	88%	34%	
Population 10,000 to 25,000	Gray	Gray	McLean / Gray County	6,746	28,184	92%	37%	83%	89%	88%	88%	34%	

## Application of Ideal System Criteria - Cumulative Percentages of State Totals

Criteria Used	Population Category	MSA/MMSA/COUNTY	NAME	Airport	Perry LeBaron Field	22,335	Percent of State Population	Percent of State Oil & Gas Tax	Percent of State Prop. Tax	Percent of State Retail Sales	Percent of State Employment	Percent of State Agric.	Percent of State Net Cash Return	
Population 10,000 to 25,000	Gray	Gray												
Population 10,000 to 25,000	Milam	Milam	Cameron Municipal Airport	29,008	21,443	92%	37%	83%	89%	89%	88%	88%	33%	
Population 10,000 to 25,000	Milam	Milam	H.H. Coffield Regional	25,451										
Population 10,000 to 25,000	Hockley	Hockley	Leveleland Municipal	33,467	31,095	93%	41%	84%	89%	89%	89%	89%	40%	
Population 10,000 to 25,000	Austin	Austin	Sealy (new)				93%	41%	84%	89%	89%	89%	40%	
Population 10,000 to 25,000	Shelby	Shelby	Center Municipal	22,857	22,857	93%	41%	84%	90%	89%	89%	41%	41%	
Population 10,000 to 25,000	Panola	Panola	Panola County-Sharpe Field	25,664	15,871	93%	43%	84%	90%	89%	89%	89%	41%	
Population 10,000 to 25,000	Fayette	Fayette	Fayette Regional Air Center	23,581	15,795	93%	44%	84%	90%	89%	89%	89%	41%	
Population 10,000 to 25,000	Grimes	Grimes	Navaosa Municipal	31,787	10,343	93%	44%	84%	90%	89%	89%	89%	42%	
Population 10,000 to 25,000	Houston	Houston	Houston County	21,734	21,734	93%	44%	84%	90%	89%	89%	89%	41%	
Population 10,000 to 25,000	Limestone	Limestone	Mexia-Limestone County	26,318	24,007	93%	45%	84%	90%	89%	89%	89%	42%	
Population 10,000 to 25,000	Aransas	Aransas	Aransas County	45,415	20,854	93%	45%	84%	90%	89%	89%	89%	41%	
Population 10,000 to 25,000	De Witt	De Witt	Cuero Municipal	14,296	13,695	93%	45%	85%	90%	89%	89%	89%	41%	
Population 10,000 to 25,000	Calhoun	Calhoun	Calhoun County	74,925	6,787	93%	45%	85%	90%	89%	89%	89%	42%	
Population 10,000 to 25,000	Lavaca	Lavaca	Hallettsville Municipal	19,032	21,426	94%	45%	85%	90%	89%	89%	89%	42%	
Population 10,000 to 25,000	Lavaca	Lavaca	Yeakum Municipal	28,187										
Population 10,000 to 25,000	Kendall	Kendall	Kendall Co-Boerne(new)				94%	45%	85%	90%	89%	89%	42%	
Population 10,000 to 25,000	Moore	Moore	Moore County	18,176	18,176	94%	46%	85%	90%	89%	89%	89%	42%	
Population 10,000 to 25,000	Moore	Moore	Sunray(new)											
Population 10,000 to 25,000	Gillespie	Gillespie	Gillespie County	48,032	16,052	94%	46%	85%	90%	89%	89%	89%	45%	
Population 10,000 to 25,000	Tyler	Tyler	Tyler County	23,119	20,803	94%	47%	85%	90%	89%	89%	89%	45%	
Population 10,000 to 25,000	Willacy	Willacy	Charles R. Johnson	3,608	3,608	94%	47%	85%	90%	89%	89%	89%	45%	
Population 10,000 to 25,000	Colorado	Colorado	Robert R. Wells, JR	17,129	17,447	94%	47%	85%	90%	90%	90%	90%	45%	
Population 10,000 to 25,000	Colorado	Colorado	Eagle Lake	16,089										
Population 10,000 to 25,000	Eastland	Eastland	Cisco Municipal	20,899	24,546	94%	47%	86%	90%	90%	90%	90%	46%	
Population 10,000 to 25,000	Eastland	Eastland	Eastland Municipal	10,183										
Population 10,000 to 25,000	Dear Smith	Dear Smith	Hereford Municipal	20,202	20,202	94%	47%	86%	90%	90%	90%	90%	50%	
Population 10,000 to 25,000	Scurry	Scurry	Winston Field	25,170	25,170	94%	48%	86%	91%	91%	90%	90%	51%	
Population 10,000 to 25,000	San Jacinto	San Jacinto												
Population 10,000 to 25,000	Falls	Falls	Marlin	27,540	27,540	94%	48%	86%	91%	91%	90%	90%	51%	
Population 10,000 to 25,000	Jones	Jones	Hamlin Municipal	16,483	23,055	95%	48%	86%	91%	91%	90%	90%	52%	
Population 10,000 to 25,000	Jones	Jones	Arlidge Field	17,142	95%									

## Application of Ideal System Criteria - Cumulative Percentages of State Totals

Criteria Used	Population Category	MSA/FMS/County	Name	Airport	Population 25-Mile Radius	Cumulative Population Coverage	Percent of State Population	Percent of State Oil & Gas Tax	Percent of State Prop. Tax	Percent of State Retail Sales	Percent of State Employment	Percent of State Agric.	Percent of Net Cash Return
Population 10,000 to 25,000	Montague	Montague	Bowie Municipal	19,692	24,091	95%	48%	86%	91%	90%			53%
Population 10,000 to 25,000	Montague	Montague	Nocona Municipal	15,546		95%							
Population 10,000 to 25,000	Young	Young	Graham Municipal	12,903	20,698	95%	49%	86%	91%	90%			52%
Population 10,000 to 25,000	Young	Young	Olinay Municipal	9,765		95%							
Population 10,000 to 25,000	Freestone	Freestone	Teague Municipal	30,311	9,949	95%	49%	86%	91%	90%			52%
Population 10,000 to 25,000	Gonzales	Gonzales	Gonzales Municipal	25,746	8,494	95%	49%	86%	91%	90%			53%
Population 10,000 to 25,000	Nolan	Nolan	Avenger Field	18,939	17,811	95%	49%	86%	91%	90%			54%
Population 10,000 to 25,000	Lampasas	Lampasas	Lampasas	12,140	10,389	95%	49%	86%	91%	90%			54%
Population 10,000 to 25,000	Bosque	Bosque	Clifton Municipal/Isehower	20,636	12,224	95%	49%	87%	91%	90%			54%
Population 10,000 to 25,000	Pecos	Pecos	Fort Stockton-Pecos County	16,515	16,515	95%	56%	87%	91%	90%			54%
Population 10,000 to 25,000	Wilbarger	Wilbarger	Wilbarger County	16,815	16,815	95%	56%	87%	91%	90%			55%
Population 10,000 to 25,000	Frio	Frio	Dilley Airport	6,762	7,799	95%	56%	87%	91%	90%			55%
Population 10,000 to 25,000	Frio	Frio	McKinley Field	13,561		95%							
Population 10,000 to 25,000	Robertson	Robertson	Hearne Municipal	91,921	13,515	95%	56%	87%	91%	91%			55%
Population 10,000 to 25,000	Reeves	Reeves	Pecos Municipal	15,474	15,474	95%	57%	87%	91%	91%			55%
Population 10,000 to 25,000	Karnes	Karnes	Karnes County	21,139	19,465	96%	57%	87%	91%	91%			55%
Population 10,000 to 25,000	Lamb	Lamb	Littlefield Municipal	13,059	3,787	96%	57%	87%	91%	91%			55%
Population 10,000 to 25,000	Burleson	Burleson	Caldwell Municipal	41,866	8,738	96%	57%	87%	91%	91%			55%
Population 10,000 to 25,000	Dawson	Dawson	Lanessa Municipal	14,486	14,486	96%	58%	88%	91%	91%			55%
Population 10,000 to 25,000	Gaines	Gaines	Gaines County	24,303	24,303	96%	66%	88%	91%	91%			55%
Population 10,000 to 25,000	Red River	Red River	Clarksville-Red River County	13,208	10,968	96%	66%	88%	91%	91%			55%
Population 10,000 to 25,000	Andrews	Andrews	Andrews County	13,842	2,029	96%	67%	88%	91%	91%			55%
Population 10,000 to 25,000	Bandera	Bandera											
Population 10,000 to 25,000	Jackson	Jackson	Jackson County	15,880	5,545	96%	67%	88%	91%	91%			55%
Population 10,000 to 25,000	Newton	Newton	Newton Municipal	23,115	3,686	96%	67%	88%	91%	91%			55%
Population 10,000 to 25,000	Lee	Lee	Giddings-Lee County	30,081	11,991	96%	67%	88%	91%	91%			55%
Population 10,000 to 25,000	Comanche	Comanche	Comanche County-City	17,157	3,871	96%	67%	88%	92%	91%			60%
Population 10,000 to 25,000	Leon	Leon	Leon County(new)										
Population 10,000 to 25,000	Duval	Duval	Duval-Freer	5,356	5,356	96%	67%	88%	92%	91%			60%
Population 10,000 to 25,000	Morris	Morris	Greater Morris County	50,032	20,419	96%	67%	88%	92%	91%			60%

Application of Ideal System Criteria - Cumulative Percentages of State Totals

Criteria Used	Population Category	MISAFMSA/County	Name	Airport	Population 25-Mile Radius	Cumulative Coverage	Percent of State Population	Percent of State Oil & Gas Tax	Percent of State Prop. Tax	Percent of State Retail Sales	Percent of State Employment	Percent of State Cash Return	Percent of State Agric.
Population 10,000 to 25,000	Terry	Terry County		16,518	15,688	96%	68%	88%	92%	91%		61%	
Population 10,000 to 25,000	Ward	Roy Hurd Memorial		15,809	11,116	96%	69%	88%	92%	91%		61%	
Population 10,000 to 25,000	Llano	Llano Municipal		11,493	11,493	96%	69%	89%	92%	91%		61%	
Population 10,000 to 25,000	Trinity	Groveton-Trinity County		18,935	12,539	96%	69%	89%	92%	91%		61%	
Population 10,000 to 25,000	Callahan					96%	69%	89%	92%	91%		61%	
Population 10,000 to 25,000	Madison	Madisonville Municipal		20,388	10,354	97%	69%	89%	92%	91%		61%	
Population 10,000 to 25,000	Runnels	Bruce Field		11,946	12,330	97%	69%	89%	92%	91%		61%	
Population 10,000 to 25,000	Runnels	Winter's Municipal		11,519		97%							
Population 10,000 to 25,000	Camp					97%	69%	89%	92%	91%		61%	
Population 10,000 to 25,000	Sabine	Pineyland Municipal		13,231	2,802	97%	69%	89%	92%	91%		61%	
Population 10,000 to 25,000	Dimmit	Dimmit County		18,858	3,678	97%	69%	89%	92%	91%		61%	
Population 10,000 to 25,000	Zapata	Zapata county		10,662	10,662	97%	71%	89%	92%	91%		61%	
Population 10,000 to 25,000	Clay					97%	71%	89%	92%	91%		61%	
Population 10,000 to 25,000	Live Oak	Live Oak County		9,911	9,911	97%	71%	89%	92%	91%		61%	
Population 10,000 to 25,000	Marion	Cypress River		46,757	6,466	97%	71%	89%	92%	91%		61%	
Population 10,000 to 25,000	Farmer	Benger Airpark		24,322	7,604	97%	71%	89%	92%	91%		61%	
Ret. Sales BELOW 10,000	Brewster	Alpine-Caspars Municipal		10,358	10,727	97%	71%	89%	92%	91%		61%	
Ret. Sales BELOW 10,000	Browster	Lajitas		369	369	97%	71%	89%	92%	91%		61%	
Ret. Sales BELOW 10,000	Ochiltree	Perryton Ochiltree County		9,967	9,967	97%	72%	89%	92%	91%		61%	
Ret. Sales BELOW 10,000	Stephens	Stephens County		10,341	9,102	97%	72%	89%	92%	91%		61%	
Ret. Sales BELOW 10,000	Haskell	Haskell Municipal		11,109	2,384	97%	72%	89%	92%	91%		61%	
Ret. Sales BELOW 10,000	Hemphill	Hemphill County		4,156	4,013	97%	74%	90%	92%	91%		61%	
Ret. Sales BELOW 10,000	Childress	Childress Municipal		7,438	7,438	97%	74%	90%	92%	91%		61%	
Ret. Sales BELOW 10,000	Bailey	Muleshoe Municipal		13,038	12,394	97%	74%	90%	92%	91%		61%	
Ret. Sales BELOW 10,000	Dallam	Denver City		11,519	11,206	97%	74%	90%	92%	91%		61%	
Ret. Sales BELOW 10,000	McCulloch	Curtis Field		8,468	8,468	97%	74%	90%	92%	91%		61%	
Ret. Sales BELOW 10,000	Castro	Dimmit Municipal		19,518	4,823	97%	78%	90%	92%	91%		61%	
Ret. Sales BELOW 10,000	Coleman	Coleman Municipal		8,835	6,988	97%	74%	90%	92%	91%		61%	
Ret. Sales BELOW 10,000	Crosby	Crosbyton Municipal		9,112	9,112	97%	74%	90%	92%	91%		61%	
Ret. Sales BELOW 10,000	Yoakum	Brookes County		12,864	2,963	97%	74%	90%	92%	91%		61%	
Ret. Sales BELOW 10,000	Franklin	Deerfield		24,907	4,252	98%	78%	90%	92%	91%		61%	
Ret. Sales BELOW 10,000	Swisher	Kimble County		11,291	10,324	97%	78%	90%	92%	91%		61%	
Ret. Sales BELOW 10,000	Brooks	Floyd		13,787	7,578	97%	78%	90%	92%	91%		61%	
Ret. Sales BELOW 10,000	Rafugio	Hamilton		7,578	7,578	97%	78%	90%	92%	91%		61%	
Ret. Sales BELOW 10,000	Kimbble	Floydada Municipal		7,680	5,070	98%	78%	90%	92%	91%		61%	
Ret. Sales BELOW 10,000	Floyd	Hamilton		12,512	7,844	98%	78%	90%	92%	91%		61%	
Ret. Sales BELOW 10,000	San Augustine	San Augustine County		12,570	2,576	98%	78%	90%	92%	91%		61%	

Application of Ideal System Criteria - Cumulative Percentages of State Totals

Criteria	Population	MSA/PMSA/County	Name	Airport	Percent of State Population	Percent of State Coverage	Percent of State Oil & Gas Tax	Percent of State Prop. Tax	Percent of State Retail Sales	Percent of State Employment	Percent of State AAGR.	Percent of Net Cash Return
Ret. Sales	BELOW 10,000	Mitchell	Mitchell	Colorado City	25,660	7,046	98%	78%	90%	92%	92%	77%
Ret. Sales	BELOW 10,000	Culberson	Culberson County		2,920	2,920	98%	79%	90%	92%	92%	77%
Ret. Sales	BELOW 10,000	Martin	Stanton Municipal		66,815	1,245	98%	79%	90%	92%	92%	78%
Ret. Sales	BELOW 10,000	Winkler	Winkler County		8,978	8,978	98%	80%	91%	92%	92%	78%
Ret. Sales	BELOW 10,000	Jim Hogg	Jim Hogg County		5,577	5,577	98%	80%	91%	92%	92%	78%
Ret. Sales	BELOW 10,000	Wheeler	Shamrock Municipal		4,862	4,231	98%	81%	91%	92%	92%	78%
Ret. Sales	BELOW 10,000	Wheeler	Wheeler Municipal		6,057	6,057	98%	81%	91%	92%	92%	78%
Oil & Gas	BELOW 10,000	Crane	Crane county		6,781	6,781	98%	84%	91%	92%	92%	78%
Oil & Gas	BELOW 10,000	Kent	Kent County		1,088	1,088	98%	85%	91%	92%	92%	78%
Oil & Gas	BELOW 10,000	Upton	Upton County		7,353	92	98%	85%	91%	92%	92%	78%
Oil & Gas	BELOW 10,000	Crockett	Ozona Municipal		3,984	3,984	98%	86%	91%	92%	92%	78%
Oil & Gas	BELOW 10,000	Carson	Panhandle-Carson County		22,390	301	98%	86%	91%	92%	92%	78%
Oil & Gas	BELOW 10,000	Reagan	Reagan County		4,246	4,089	98%	87%	91%	92%	92%	79%
Oil & Gas	BELOW 10,000	Sutton	Sutton Municipal		6,363	6,363	98%	88%	91%	92%	92%	79%
Oil & Gas	BELOW 10,000	Glasscock	Glasscock		886	886	98%	91%	92%	92%	92%	79%
Oil & Gas	BELOW 10,000	Garza	Post-Garza County Municipal		5,264	5,264	98%	89%	91%	92%	92%	79%
Oil & Gas	BELOW 10,000	Borden	Borden		988	988	98%	89%	91%	92%	92%	79%
Oil & Gas	BELOW 10,000	Cochran	Cochran County		4,372	3,454	98%	89%	91%	92%	92%	79%
Oil & Gas	BELOW 10,000	Lipscomb	Foilie/Lipscomb County		2,240	1,227	98%	89%	91%	92%	92%	79%
Oil & Gas	BELOW 10,000	Lipscomb	Higgins-Lipscomb County		1,183	1,183	98%	89%	91%	92%	92%	79%
Oil & Gas	BELOW 10,000	Sherman	Stratford Field (new)		2,941	2,941	98%	90%	91%	92%	92%	82%
Oil & Gas	BELOW 10,000	McMullen	McMullen		988	988	98%	90%	91%	92%	92%	82%
Oil & Gas	BELOW 10,000	Terrell	Terrell		502	502	98%	90%	91%	92%	92%	81%
Oil & Gas	BELOW 10,000	Ironton	Ironton		986	986	98%	90%	91%	92%	92%	81%
Oil & Gas	BELOW 10,000	King	King		988	988	98%	90%	91%	92%	92%	81%
Oil & Gas	BELOW 10,000	Hansford	Gruver Municipal		5,146	3,981	98%	90%	91%	92%	92%	82%
Oil & Gas	BELOW 10,000	Hansford	Spearmen Municipal		5,980	5,980	98%	90%	91%	92%	92%	82%
Oil & Gas	BELOW 10,000	Sterling	Sterling		986	986	98%	90%	91%	92%	92%	81%
Oil & Gas	BELOW 10,000	Roberts	Roberts		988	988	98%	90%	91%	92%	92%	81%
Oil & Gas	BELOW 10,000	Kenedy	Kenedy		1,547	52	98%	90%	91%	92%	92%	81%
Oil & Gas	BELOW 10,000	Hardeman	Quanah Municipal		5,133	5,133	98%	90%	91%	92%	92%	81%
Oil & Gas	BELOW 10,000	Loving	Loving		988	988	98%	90%	91%	92%	92%	81%
Oil & Gas	BELOW 10,000	Jack	Jacksboro Municipal		10,871	1,353	98%	91%	91%	92%	92%	81%
Oil & Gas	BELOW 10,000	Stonewall	Stonewall County		1,652	162	98%	91%	91%	92%	92%	81%
Oil & Gas	BELOW 10,000	Coke	Robert Lee		2,974	2,974	98%	91%	91%	92%	92%	81%
Oil & Gas	BELOW 10,000	Goliad	Goliad		6,126	506	98%	91%	91%	92%	92%	81%
Oil & Gas	BELOW 10,000	Schleicher	Eldorado		2,503	2,503	98%	91%	91%	92%	92%	81%
Oil & Gas	BELOW 10,000	Edwards	Edwards County		988	988	98%	91%	91%	92%	92%	81%
Oil & Gas	BELOW 10,000	Throckmorton	Throckmorton		988	988	98%	91%	91%	92%	92%	81%
Agriculture	BELOW 10,000	Hartley	Dalhart Municipal		10,680	9,967	98%	91%	91%	93%	92%	90%
Agriculture	BELOW 10,000	Lynn	T-bar		6,948	1,485	98%	91%	91%	93%	92%	90%
Agriculture	BELOW 10,000	Armstrong	Armstrong		988	988	98%	91%	91%	93%	92%	90%
Agriculture	BELOW 10,000	Fisher	Fisher County		18,061	643	98%	91%	91%	93%	92%	90%
Agriculture	BELOW 10,000	Oldham	Oldham County		3,089	2,097	98%	91%	91%	93%	92%	91%
Agriculture	BELOW 10,000	Hall	Memphis Municipal		4,568	3,314	98%	91%	91%	92%	92%	91%
Agriculture	BELOW 10,000	San Saba	San Saba County Municipal		8,900	7,238	98%	91%	91%	92%	92%	91%
Agriculture	BELOW 10,000	Hudspeth	Deli City Municipal		986	2,333	98%	91%	91%	93%	92%	91%
Agriculture	BELOW 10,000	Hudspeth	Mita High		1,338	988	98%	91%	91%	92%	92%	91%
Agriculture	BELOW 10,000	Concho	Eden-Concho County (new)		4,568	3,314	98%	91%	91%	93%	92%	91%
Agriculture	BELOW 10,000	Rains	Rains County		66,371	985	98%	91%	91%	92%	92%	91%
Agriculture	BELOW 10,000	Baylor	Seymour Municipal		4,883	4,883	98%	91%	91%	92%	92%	91%
Agriculture	BELOW 10,000	Mason	Mason County		4,905	3,211	98%	91%	91%	93%	92%	91%
Agriculture	BELOW 10,000	Knox	Knox City Municipal		8,318	3,161	98%	91%	91%	93%	92%	91%
Agriculture	BELOW 10,000	Knox	Munday Municipal		8,697	986	98%	91%	91%	93%	92%	91%
Agriculture	BELOW 10,000	Dickens	Spur Municipal		2,678	1,681	98%	91%	91%	92%	92%	92%

Application of Ideal System Criteria - Cumulative Percentages of State Totals

Criteria Used	Population Category	MSA/MSA/County	Name	Airport	25-Mile Radius	Cumulative Population	Percent of State Coverage	Percent of State Population	Percent of State Oil & Gas Tax	Percent of State Prod. Tax	Percent of State Retail Sales	Percent of State Employment	Percent of State Agic.	Net Cash Return
BELOW 10,000	Presidio	Presidio	Maria Municipal		4,071	3,946	98%	91%	92%	93%	92%	92%	92%	
BELOW 10,000	Presidio	Presidio	Presidio Letty International		3,766	98%	91%	92%	93%	92%	92%	92%	92%	
BELOW 10,000	Donley	Donley	Clarendon Municipal		3,677	2,650	98%	91%	92%	93%	92%	92%	92%	
BELOW 10,000	Briscoe	Briscoe				98%	91%	92%	93%	92%	92%	92%	92%	
BELOW 10,000	Shackelford	Shackelford	Albany Municipal		9,767	2,854	98%	91%	92%	93%	92%	92%	92%	
BELOW 10,000	Cottle	Cottle	Dan E. Richards Municipal		2,242	2,153	98%	91%	92%	93%	92%	92%	92%	
BELOW 10,000	Collingsworth	Collingsworth	Marian Airport			98%	91%	92%	93%	92%	92%	92%	92%	
BELOW 10,000	Motley	Motley				98%	91%	92%	93%	92%	92%	92%	92%	
BELOW 10,000	Jeff Davis	Jeff Davis				98%	91%	92%	93%	92%	92%	92%	92%	
BELOW 10,000	Menard	Menard	Menard County		4,229	4,229	98%	91%	92%	93%	92%	92%	92%	
BELOW 10,000	Blanco	Blanco				98%	91%	92%	93%	92%	92%	92%	92%	
BELOW 10,000	Foard	Foard	Foard County		5,669	1,595	98%	91%	92%	93%	92%	92%	92%	
BELOW 10,000	Real	Real	Real County			98%	91%	92%	93%	92%	92%	92%	92%	
BELOW 10,000	Delta	Delta				98%	91%	92%	93%	92%	92%	92%	92%	
BELOW 10,000	La Salle	La Salle	Cotulla-La Salle County		7,658	1,548	98%	91%	92%	93%	92%	92%	92%	
BELOW 10,000	Somervell	Somervell				98%	91%	92%	93%	92%	92%	92%	92%	
BELOW 10,000	Kinney	Kinney				98%	91%	92%	93%	92%	92%	92%	92%	
BELOW 10,000	Mills	Mills	Mills County (New)			98%	91%	92%	93%	92%	92%	92%	92%	
		TOTAL				18,815,666	98%	91%	92%	93%	92%	92%	92%	
														93%



**Appendix C**  
**Application of Ideal System Criteria - Aviation Activity Measures**



Application of Ideal System Criteria - Aviation Activity Measures

Criteria Used	Population Category	MSA/MSA+County	NAME	Airport	Population within 25-Mile Radius	Cumulative Population Coverage	Percent of State Population	1996 Based Aircraft	1996 Percent of State Based Aircraft	1996 Aircraft Operations	Percent of State Operations
Population	1 Million +	Houston	Harris	David Wayne Hooks Memorial	407,543	285	2%	146,870	2%	2%	2%
Population	1 Million +		Harris	Ellington Field	1,987,813	120	3%	94,495	3%	94,495	3%
Population	1 Million +		Harris	Houston Intercontinental	331,122	48	4%	313,753	7%	313,753	7%
Population	1 Million +		Harris	West Houston	1,351,736	207	6%	81,000	8%	81,000	8%
Population	1 Million +		Harris	Houston Westside(New)	0	0	6%	0	0%	0	0%
Population	1 Million +		Harris	William P. Hobby	2,549,833	210	7%	240,606	11%	240,606	11%
Population	1 Million +		Harris	La Porte Municipal	1,037,926	146	9%	116,549	12%	116,549	12%
Population	1 Million +		Chambers	Chambers County-Winnie Stowell	28,814	16	9%	6,900	12%	6,900	12%
Population	1 Million +		Chambers	Sugar Land Municipal	2,092	6	9%	1,800	12%	1,800	12%
Population	1 Million +		Fort Bend	Fort Bend	1,516,110	136	10%	75,041	13%	75,041	13%
Population	1 Million +		Houston-Southwest	Houston-Southwest	1,384,887	178	11%	53,500	14%	53,500	14%
Population	1 Million +		Cleveland Municipal	Cleveland Municipal	32,718	35	12%	10,600	14%	10,600	14%
Population	1 Million +		Liberty	Liberty Municipal	44,052	22	12%	10,025	14%	10,025	14%
Population	1 Million +		Montgomery	Montgomery County	230,012	111	13%	57,580	15%	57,580	15%
Population	1 Million +		Walker	Walker	0	13%	15%	0	15%	0	15%
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Population	1 Million +	DALLAS	Dallas	Addison	2,401,534	3,303,354	38%	794	19%	284,680	18%
Population	1 Million +	Dallas	Dallas	Dallas Love Field	1,950,172	294	22%	213,522	21%	213,522	21%
Population	1 Million +	Dallas	Dallas	Redbird	2,755,405	136	23%	85,808	22%	85,808	22%
Population	1 Million +	Dallas	Dallas	Lancaster	1,601,393	125	24%	40,500	22%	40,500	22%
Population	1 Million +	Dallas	Dallas	Phil L. Hudson Municipal	429,505	207	26%	80,000	23%	80,000	23%
Population	1 Million +	Dallas	Dallas	McKinney Municipal	412,101	143	27%	100,000	24%	100,000	24%
Population	1 Million +	Denton	Denton	Denton Municipal	372,824	114	28%	134,000	26%	134,000	26%
Population	1 Million +	Ellis	Ellis	Ennis Municipal	78,483	29	28%	13,546	26%	13,546	26%
Population	1 Million +	Ellis	Ellis	Midlothian/Waxahachie Municipal	264,124	27	29%	1,100	26%	1,100	26%
Population	1 Million +	Henderson	Henderson	Athens Municipal	6,757	16	29%	4,800	26%	4,800	26%
Population	1 Million +	Hunt	Hunt	Caddo Mills Municipal	56,893	15	29%	12,388	26%	12,388	26%
Population	1 Million +	Hunt	Hunt	Commerce Municipal	55,624	4	29%	2,100	26%	2,100	26%
Population	1 Million +	Hunt	Hunt	Majors	83,172	27	29%	10,200	26%	10,200	26%
Population	1 Million +	Kaufman	Kaufman	Terrill Municipal	72,728	76	30%	18,350	27%	18,350	27%
Population	1 Million +	Rockwall	Rockwall	Rockwall Municipal	48,211	80	30%	38,020	27%	38,020	27%
Population	1 Million +	Tarrant	Tarrant	Arlington Municipal	1,921,165	1,349,155	45%	290	33%	148,000	29%
Population	1 Million +	Tarrant	Tarrant	Dallas-Fort Worth International	2,913,268	0	33%	851,185	39%	851,185	39%
Population	1 Million +	Tarrant	Tarrant	Fort Worth Alliance	1,547,986	0	33%	140,655	41%	140,655	41%
Population	1 Million +	Tarrant	Tarrant	Fort Worth Meacham	1,327,538	382	36%	319,933	45%	319,933	45%
Population	1 Million +	Tarrant	Tarrant	Fort Worth Spinks	1,072,228	88	37%	55,300	45%	55,300	45%
Population	1 Million +	Tarrant	Tarrant	Fort Worth Carswell	1,220,711	0	37%	0	45%	0	45%
Population	1 Million +	Tarrant	Tarrant	Grand Prairie Municipal	2,347,638	253	39%	160,000	47%	160,000	47%
Population	1 Million +	Tarrant	Tarrant	Hood	38,911	29	39%	8,000	47%	8,000	47%
Population	1 Million +	Johnson	Johnson	Cleburne Municipal	117,758	103	40%	29,804	48%	29,804	48%
Population	1 Million +	Parker	Parker	Mineral Wells	63,109	68	41%	22,216	48%	22,216	48%
Population	1 Million +	Parker	Parker	Weatherford (New)	0	0	41%	0	48%	0	48%
Population	1 Million +	SAN ANTONIO MSA	Bexar	San Antonio International	1,346,131	1,488,741	53%	0	41%	215,155	51%
Population	1 Million +	Bexar	Bexar	Stinson Municipal	1,301,291	53	41%	49,248	51%	49,248	51%
Population	1 Million +	Comal	Comal	Guadalupe	0	41%	0	0	51%	0	51%
Population	1 Million +	Guadalupe	Guadalupe	New Braunfels Municipal	166,752	58	41%	24,000	52%	24,000	52%
Population	1 Million +	Wilson	Wilson	Wilson	0	41%	0	0	52%	0	52%
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AUSTIN-SAN MARCOS MSA	Travis	Austin(New)	Austin	Austin	984,726	58%	0	41%	0	52%	0
Population	1 Million +	Travis	Travis	Austin Executive Airpark	740,307	100	42%	94,080	53%	94,080	53%
Population	1 Million +	Travis	Travis	Robert Mueller	779,955	266	45%	186,962	55%	186,962	55%
Population	1 Million +	Eastrop	Eastrop	Smithville Municipal	51,946	21	45%	6,050	55%	6,050	55%
Population	1 Million +	Caldwell	Caldwell	Lockhart Municipal	31,286	39	45%	11,950	55%	11,950	55%

Application of Ideal System Criteria - Aviation Activity Measures

Criteria Used	Population Category	MSA/PMAS/County	Name	Airport	Population within 25-Mile Radius	Cumulative Population Coverage	Percent of State Population	1996 Based Aircraft	Percent of State Based Aircraft	1996 Aircraft Operations	Percent of State Operations
Population 1 Million +		Caldwell	The Carter Memorial San Marcos Municipal	3,1218	133,847	100	45%	2,100	46%	50,000	56%
Population 1 Million +		Hays									
Population 1 Million +		Williamson	Georgetown Municipal	159,106		133	47%	87,062	87,062	16,600	77%
Population 1 Million +		Williamson	Taylor Municipal	105,313		30	47%	9,000	9,000	6,300	57%
Population 250,000 to 1,000,000	EL PASO MSA	El Paso	El Paso International	661,477	669,129	62%	329	50%	148,374	148,374	59%
Population 250,000 to 1,000,000	EL PASO	El Paso	West Texas	654,553		70	51%	18,600	18,600	8,888	59%
Population 250,000 to 1,000,000	EL PASO	Fanns		363,497		20	51%	13,000	13,000	6,300	59%
Population 250,000 to 1,000,000	MCALENEE-EDIN-MISSION MSA	Hidalgo	Edinburg Rio Grande Valley Regional Frt.	415,116	567,157	65%	0	51%	600	600	59%
Population 250,000 to 1,000,000	Hidalgo	McAllen Miller International		417,675		92	52%	61,297	61,297	30,588	60%
Population 250,000 to 1,000,000	Hidalgo	Mid Valley		388,630		80	52%	24,200	24,200	11,200	60%
Population 250,000 to 1,000,000	BEAUMONT-PT. ARTHUR MSA	Hardin	Hawthorne Field Beaumont Municipal	154,918	363,942	67%	12	52%	4,206	4,206	60%
Population 250,000 to 1,000,000	Jefferson	Jefferson	297,666		61	53%	18,800	18,800	6,000	60%	
Population 250,000 to 1,000,000	Jefferson	Jefferson County	287,965		76	54%	45,406	45,406	13,100	61%	
Population 250,000 to 1,000,000	Orange	Orange County	358,238		30	54%	9,532	9,532	4,000	61%	
Population 250,000 to 1,000,000	Nueces	Bishop Municipal	56,716	376,817	69%	17	54%	5,600	5,600	2,200	61%
Population 250,000 to 1,000,000	Nueces	Corpus Christi International	350,836		69	55%	136,507	136,507	53,000	63%	
Population 250,000 to 1,000,000	Nueces	Mustang Beach	320,829		0	55%	7,000	7,000	2,000	63%	
Population 250,000 to 1,000,000	Nueces	Nueces County	359,301		23	55%	8,700	8,700	2,300	63%	
Population 250,000 to 1,000,000	San Patricio	Aransas Pass	319,378		2	55%	6,100	6,100	1,500	63%	
Population 250,000 to 1,000,000	San Patricio	T.P. McCampbell	320,829		5	55%	1,200	1,200	300	63%	
Population 250,000 to 1,000,000	San Patricio	San Patricio County	37,693		39	55%	10,300	10,300	2,500	63%	
Population 250,000 to 1,000,000	BROWN-HARL-SAN BEN. MSA	Cameron	Brownsville/South Padre Island Int'l.	204,523	248,235	70%	65	56%	68,905	68,905	64%
Population 250,000 to 1,000,000	Cameron	Rio Grande Valley International	248,235		31	56%	54,914	54,914	18,000	65%	
Population 250,000 to 1,000,000	Cameron	Port Isabel-Cameron County	213,617		20	56%	8,000	8,000	2,000	65%	
Population 250,000 to 1,000,000	Cameron	San Benito Municipal	315,289		18	56%	5,400	5,400	1,300	65%	
Population 250,000 to 1,000,000	KILLEEN-TEMPLE MSA	Bell	Killeen Municipal	185,761	321,577	72%	62	57%	42,500	42,500	65%
Population 250,000 to 1,000,000	Bell	Draughan Miller Municipal	242,229		57	57%	47,531	47,531	13,000	66%	
Population 250,000 to 1,000,000	Coryell	Gatesville City-County	422,228		12	57%	3,600	3,600	900	66%	
Population 100,000 to 250,000	GALVESTON-TEXAS CITY PMSA	Galveston	Galveston Municipal/Schles Field	241,981	133,470	72%	102	58%	62,639	62,639	67%
Population 100,000 to 250,000	Galveston	Houston Gulf	550,489		82	58%	24,300	24,300	6,000	67%	
Population 100,000 to 250,000	Odessa-Midland MSA	Ector	Odessa-Schlemeyer Field	225,565	241,053	73%	170	60%	45,360	45,360	68%
Population 100,000 to 250,000	Odessa-Midland MSA	Midland	Midland Airport	212,563		83	61%	31,700	31,700	6,300	68%
Population 100,000 to 250,000	Midland	Midland International	216,481		83	62%	108,782	108,782	26,000	69%	
Population 100,000 to 250,000	LUBBOCK MSA	Lubbock	Lubbock International	232,974	235,243	75%	124	63%	104,574	104,574	71%
Population 100,000 to 250,000	Lubbock	Lubbock Station Municipal	224,071		12	63%	9,700	9,700	2,200	71%	
Population 100,000 to 250,000	BRAZORIA MSA	Brazoria	219,898	133,638	76%	64%	60,000	60,000	15,000	71%	
Population 100,000 to 250,000	Brazoria	Clover Field	2,436,823		146	65%	75,280	75,280	18,000	72%	
Population 100,000 to 250,000	Potter	Amarillo International	202,834	207,985	77%	36	65%	88,889	88,889	7,300	73%
Population 100,000 to 250,000	Randall	Tradewind	233,277		84	65%	32,926	32,926	7,300	74%	
Population 100,000 to 250,000	Gregg	Gladewater Municipal	87,756	272,531	78%	65	66%	16,600	16,600	4,000	74%
Population 100,000 to 250,000	Gregg	Gregg County	183,380		84	67%	88,888	88,888	2,000	75%	
Population 100,000 to 250,000	Harrison	Harrison County	60,249		38	67%	11,400	11,400	2,000	75%	
Population 100,000 to 250,000	Upshur	Gilmer-Upshur County	83,534		21	67%	6,300	6,300	1,000	75%	
Population 100,000 to 250,000	Longview-MARSHALL MSA										
Population 100,000 to 250,000											

Application of Ideal System Criteria - Aviation Activity Measures

Criteria Used	Population Category	MSA/PMAS/County	Name	Airport	Population within 25-Mile Radius	Cumulative Population Coverage	Percent of State Population	1996 Based Aircraft	Percent of State Based Aircraft	1996 Aircraft Operations	Percent of State Operations
Population 100,000 to 250,000	WACO MSA	McLennan	McGregor Municipal		190,258	186,001	79%	65	68%	33,750	76%
Population 100,000 to 250,000		McLennan	TSTC Waco		197,106		68%	19	68%	51,680	76%
Population 100,000 to 250,000		McLennan	Waco Regional		205,081		69%	55	69%	60,769	77%
Population 100,000 to 250,000	LAREDO MSA	Webb	Laredo International		177,147	177,147	80%	89	69%	54,861	78%
Population 100,000 to 250,000		Smith	Tyler Pounds Field		186,153	165,144	81%	121	70%	10,442	78%
Population 100,000 to 250,000		Brazos	Coulter Field		146,467	162,401	82%	50	71%	14,100	78%
Population 100,000 to 250,000	BRYAN-COLLEGE STATION MSA	Brazos	Easterwood Field		158,037		49	71%	62,762	79%	
Population 100,000 to 250,000		Archer	Kickapoo Downtown Airport		140,076		0	76	72%	25,350	79%
Population 100,000 to 250,000	WICHITA FALLS MSA	Wichita	Sheppard AFB/Wichita Falls Municipal		141,976		76	72%	53,829	80%	
Population 100,000 to 250,000		Taylor	Abilene Regional		136,883	136,883	83%	160	73%	102,212	81%
Population 100,000 to 250,000	TEXARKANA MSA	Bowie	New Boston [new]		85,080	83%	0	71%	0	0	79%
Population 100,000 to 250,000		Bowie	Texarkana Regional-Wendy Field		85,080		76	73%	58,246	82%	
Population 100,000 to 250,000	MILLER CO. AK							74%			82%
Population 100,000 to 250,000	SAN ANGELO MSA	Tom Green	Mathis Field		105,826	105,826	84%	135	75%	70,134	83%
Population 100,000 to 250,000		Walker	Huntsville Municipal		95,307	101,644	85%	27	75%	6,000	83%
Population 100,000 to 250,000	SHERMAN-DENISON MSA	Grayson	Grayson County		100,611		74	76%	27,600	83%	
Population 50,000 to 100,000	VICTORIA MSA	Victoria	Victoria Regional		88,435	88,435	85%	61	76%	24,018	83%
Population 50,000 to 100,000		Angelina	Angelina County		75,924	75,924	85%	51	77%	37,250	84%
Population 50,000 to 100,000	NACOGDOCHES	Nacogdoches	A.L. Mangham Jr. Regional		105,032	59,321	86%	47	77%	18,200	84%
Population 50,000 to 100,000		Walker	Huntsville Municipal		56,253	55,211	86%	36	77%	34,650	84%
Population 50,000 to 100,000	Anderson	Palesine Municipal			50,533	44,522	86%	33	78%	9,750	84%
Population 25,000 to 50,000	Starr	Starr County			46,527	43,610	86%	2	78%	900	84%
Population 25,000 to 50,000	Lamar	Lamar	Cox Field		52,008	51,753	87%	27	78%	10,924	85%
Population 25,000 to 50,000	Rusk	Rusk	Rusk County		66,038	20,507	87%	20	78%	9,400	85%
Population 25,000 to 50,000	Maverick	Eagle Pass (New)					0	78%	0	0	85%
Population 25,000 to 50,000	Cherokee	Cherokee	Cherokee County		74,518	29,349	87%	28	78%	8,450	85%
Population 25,000 to 50,000	Val Verde	Val Verde	Dai Rio International		35,972	35,972	87%	35	79%	26,380	85%
Population 25,000 to 50,000	Navarro	Navarro	C. David Campbell Field-Corsicana Muni		45,425	43,125	87%	42	79%	12,420	85%
Population 25,000 to 50,000	Kerr	Kerr	Kerrville Municipal/Louis Schreiner Fld.		38,636	38,636	88%	57	80%	34,100	86%
Population 25,000 to 50,000	Van Zandt	Van Zandt	Willis Point Municipal		44,998	13,154	88%	4	80%	1,200	86%
Population 25,000 to 50,000	Polk	Polk	Livingston Municipal		40,544	34,583	88%	10	80%	4,800	86%
Population 25,000 to 50,000	Wharton	Wharton	Wharton Municipal		51,616	50,427	88%	28	80%	9,100	86%

Application of Ideal System Criteria - Aviation Activity Measures

Criteria	Population Category	MSA/PMIA/County	NAME	Airport	Population within 25-Mile Radius	Cumulative Population Coverage	Percent of State Population	1996 Based Aircraft	Percent of State Based Aircraft	1996 Aircraft Operations	Percent of State Operations
Population 25,000 to 50,000	Wise	Bridgeport Municipal			21,878	42,627	38%	45	80%	9,200	86%
Population 25,000 to 50,000	Wise	Decatur Municipal			39,462		20	80%		6,000	86%
Population 25,000 to 50,000	Wise	Alice International			61,465	32,660	89%	30	81%	24,490	86%
Population 25,000 to 50,000	Jim Wells										
Population 25,000 to 50,000	Matagorda	Bay City Municipal			45,986	41,188	89%	55	81%	16,000	87%
Population 25,000 to 50,000	Matagorda	Palacios Municipal			20,153		8	81%		4,460	87%
Population 25,000 to 50,000	Brown	Brownwood Municipal			38,303	38,303	89%	31	81%	12,990	87%
Population 25,000 to 50,000	Hale	Abernathy Municipal			122,401	39,660	89%	1	81%	4,000	87%
Population 25,000 to 50,000	Hale	Hale County			34,267		99	82%		35,748	87%
Population 25,000 to 50,000	Jasper	Jasper					3	83%		900	87%
Population 25,000 to 50,000	Atascosa	Pleasanton Municipal			30,502	25,473	89%	16	82%	4,060	87%
Population 25,000 to 50,000	Jasper	Jasper County Bell Field			34,684	48,036	90%	12	83%	5,000	87%
Population 25,000 to 50,000	Jasper	Kirbyville			23,132						
Population 25,000 to 50,000	Medina	Castroville Municipal			1,186,758	53,310	90%	56	83%	25,000	88%
Population 25,000 to 50,000	Medina	Devine Municipal			23,242		21	83%		5,600	88%
Population 25,000 to 50,000	Medina	Hondo Municipal			23,576		36	84%		161,370	90%
Population 25,000 to 50,000	Wood	Minneola-Gutman			59,165	50,104	90%	9	84%	2,700	90%
Population 25,000 to 50,000	Wood	Wimberley Municipal			32,481		9	84%		3,000	90%
Population 25,000 to 50,000	Howard	Big Spring McMathton-Winkie			37,401	34,834	90%	43	84%	14,750	90%
Population 25,000 to 50,000	Cooke	Gainesville Municipal			45,147	38,526	90%	49	84%	10,300	90%
Population 25,000 to 50,000	Kleberg	Kleberg County			62,921	5,659	90%	17	85%	9,420	90%
Population 25,000 to 50,000	Hopkins	Sulphur Springs Municipal			42,975	3,618	90%	28	85%	8,890	90%
Population 25,000 to 50,000	Erath	Dublin Municipal			37,236	40,515	91%	7	85%	2,550	90%
Population 25,000 to 50,000	Erath	Clark Field Municipal			37,481		21	85%		7,500	90%
Population 25,000 to 50,000	Cass	Atlanta Municipal			31,080	31,080					
Population 25,000 to 50,000	Hill	Hillsboro Municipal			34,152	19,131	91%	4	85%	1,200	90%
Population 25,000 to 50,000	Burnet	Burnet Municipal Kate Craddock Field			35,878	36,878	91%	33	86%	13,900	91%
Population 25,000 to 50,000	Washington	Brenham Municipal			66,485	53,733	91%	27	86%	9,650	91%
Population 25,000 to 50,000	Bee	Beeville Municipal			25,356	22,687		15	86%	6,000	91%
Population 25,000 to 50,000	Fannin	Jones Field			31,760	24,462		28	86%	5,700	91%
Population 25,000 to 50,000	Palo Pinto	Possum Kingdom			6,308	3,098		3	86%	2,300	91%
Population 25,000 to 50,000	Titus	Mount Pleasant Municipal			60,777	46,208		26	86%	7,850	91%
Population 25,000 to 50,000	Hutchinson	Hutchinson County			30,365	30,365		21	87%	7,016	91%
Population 25,000 to 50,000	Uvalde	Garnett Field			25,955	24,263		37	87%	19,750	91%

## Application of Ideal System Criteria - Aviation Activity Measures

Criteria Used	Population Category	MSA/PHSA/County	Name	Airport	Population within 25-Mile Radius	Cumulative Population Coverage	Percent of State Population	1996 Based Aircraft	Percent of State Based Aircraft	1996 Aircraft Operations	Percent of State Operations
Population 10,000 to 25,000	Gray	McLean / Gray County	Gray	McLean / Gray County	6,746	28,164	92%	1	87%	500	91%
Population 10,000 to 25,000	Gray	Parry Lefors Field			22,335			30	87%	9,520	91%
Population 10,000 to 25,000	Milam	Cameron Municipal Airport	Milam	Cameron Municipal Airport	29,008	21,443	92%	8	87%	2,400	91%
Population 10,000 to 25,000	Milam	H.H. Coffield Regional	Milam	H.H. Coffield Regional	25,451			6	87%	1,800	92%
Population 10,000 to 25,000	Hockley	Leverland Municipal			31,467	31,095	93%	42	88%	15,525	92%
Population 10,000 to 25,000	Austin	Sealy (new)						0	88%	0	92%
Population 10,000 to 25,000	Shelby	Center Municipal			22,857	22,857	93%	23	88%	6,630	92%
Population 10,000 to 25,000	Panola	Panola County Sharpe Field	Panola	Panola County Sharpe Field	26,864	15,871	91%	16	88%	22,000	92%
Population 10,000 to 25,000	Fayette	Fayette Regional Air Center			23,581	15,795	93%	6	88%	2,700	92%
Population 10,000 to 25,000	Grimes	Nayasota Municipal	Grimes	Nayasota Municipal	31,787	10,343	93%	5	88%	1,500	92%
Population 10,000 to 25,000	Aansas	Aransas County			21,734	21,734	93%	20	88%	6,000	92%
Population 10,000 to 25,000	Houston	Houston County									
Population 10,000 to 25,000	Limestone	Mexia-Limestone County			26,318	24,007	93%	20	88%	5,700	92%
Population 10,000 to 25,000	Calhoun	Calhoun County			74,925	6,787	93%	18	89%	3,000	93%
Population 10,000 to 25,000	Lavaca	Hallettsville Municipal	Lavaca	Hallettsville Municipal	19,032	21,426	94%	2	89%	300	93%
Population 10,000 to 25,000	Lavaca	Yoakum Municipal	Lavaca	Yoakum Municipal	28,187			7	89%	1,680	93%
Population 10,000 to 25,000	Kendall	Kendall Co-Boerne (new)						0	89%	0	93%
Population 10,000 to 25,000	Moore	Moore County	Moore	Moore County	18,176	18,176	94%	11	89%	5,060	93%
Population 10,000 to 25,000	Moore	Sunray (new)	Moore	Sunray (new)				0	89%	4,000	93%
Population 10,000 to 25,000	Gillespie	Gillespie County	Gillespie	Gillespie County	48,032	16,052	94%	25	89%	8,875	93%
Population 10,000 to 25,000	Tyler	Tyler County	Tyler	Tyler County	23,119	20,503	94%	2	89%	600	93%
Population 10,000 to 25,000	Willacy	Charles R. Johnson	Willacy	Charles R. Johnson	3,608	3,608	94%	0	89%	1,100	93%
Population 10,000 to 25,000	Colorado	Colorado	Colorado	Colorado	17,129	17,447	94%	12	90%	2,800	93%
Population 10,000 to 25,000	Colorado	Eagle Lake			16,089			11	90%	3,600	93%
Population 10,000 to 25,000	Eastland	Cisco Municipal	Eastland	Cisco Municipal	20,899	24,546	94%	6	90%	1,800	93%
Population 10,000 to 25,000	Eastland	Eastland	Eastland	Eastland	10,183			15	90%	5,600	93%
Population 10,000 to 25,000	Deaf Smith	Hereford Municipal			20,202	20,202	94%	22	90%	6,690	94%
Population 10,000 to 25,000	Scurry	Scurry									
Population 10,000 to 25,000	San Jacinto	San Jacinto								0	94%
Population 10,000 to 25,000	Falls	Falls			27,540	27,540	94%	6	90%	2,400	94%
Population 10,000 to 25,000	Marlin										

Application of Ideal System Criteria - Aviation Activity Measures

Criteria Used	Population Category	MSA/MSCOUNTY	NAME	Airport	Population within 25-Mile Radius	Cumulative Population Coverage	Percent of State Population	1996 Based Aircraft	Percent of State Based Aircraft	1996 Aircraft Operations	Percent of State Operations
Population	10,000 to 25,000	Jones	Jones	Harmin Municipal	16,463	23,055	95%	4	90%	3,000	94%
Population	10,000 to 25,000	Jones	Jones	Arledge Field	17,142		95%	15	90%	11,200	94%
Population	10,000 to 25,000	Montague	Montague	Bowie Municipal	19,692	24,091	95%	15	91%	5,580	94%
Population	10,000 to 25,000	Montague	Montague	Nocona Municipal	15,546	95%	0	91%		500	94%
Population	10,000 to 25,000	Young	Young	Graham Municipal	12,903	20,638	95%	31	91%	9,300	94%
Population	10,000 to 25,000	Young	Young	Oney Municipal	9,765	95%	8	91%		15,500	94%
Population	10,000 to 25,000	Freestone	Freestone	Teuque Municipal	30,311	9,949	95%	5	91%	1,000	94%
Population	10,000 to 25,000	Gonzales	Gonzales	Conrades Municipal	25,746	8,494	95%	7	91%	1,500	94%
Population	10,000 to 25,000	Nolan	Nolan	Avenger Field	18,939	17,811	95%	22	91%	2,100	94%
Population	10,000 to 25,000	Lampasas	Lampasas		12,140	10,389	95%	16	91%	4,600	94%
Population	10,000 to 25,000	Bosque	Bosque	Clifton Municipal/Isenthaler	20,636	12,224	95%	22	92%	6,600	94%
Population	10,000 to 25,000	Pecos	Pecos	Fort Stockton-Pecos County	16,515	16,615	95%	27	92%	8,350	95%
Population	10,000 to 25,000	Wilibarger	Wilibarger	Wilbarger County	16,815	16,815	95%	25	92%	11,600	95%
Population	10,000 to 25,000	Frio	Frio	Dilley Airpark	6,762	7,799	95%	4	92%	300	95%
Population	10,000 to 25,000	Frio	Frio	McKinley Field	13,561	95%	10	92%		2,000	95%
Population	10,000 to 25,000	Robertson	Robertson	Hearne Municipal	91,921	13,515	95%	18	92%	5,400	95%
Population	10,000 to 25,000	Reeves	Reeves	Pecos Municipal	15,474	15,474	95%	19	92%	7,800	95%
Population	10,000 to 25,000	Karnes	Karnes	Karnes County	21,139	19,465	96%	11	92%	11,524	95%
Population	10,000 to 25,000	Lamb	Lamb	Littlefield Municipal	13,099	3,787	96%	15	93%	7,100	95%
Population	10,000 to 25,000	Burleson	Burleson	Caldwell Municipal	4,1,866	8,738	96%	11	93%	3,300	95%
Population	10,000 to 25,000	Dawson	Dawson	Lamesa Municipal	14,486	14,486	96%	26	93%	12,600	95%
Population	10,000 to 25,000	Gaines	Gaines	Gaines County	24,303	24,303	96%	23	93%	12,250	95%
Population	10,000 to 25,000	Red River	Red River	Clarksville-Red River County	13,208	10,968	96%	12	93%	3,300	96%
Population	10,000 to 25,000	Andrews	Andrews	Andrews County	13,842	2,029	96%	20	93%	6,000	96%
Population	10,000 to 25,000	Bandera	Bandera					0		0	96%
Population	10,000 to 25,000	Jackson	Jackson	Jackson County	15,880	5,545	96%	23	94%	8,420	96%
Population	10,000 to 25,000	Newton	Newton	Newton Municipal	23,115	3,686	96%	6	94%	1,500	96%
Population	10,000 to 25,000	Lee	Lee	Giddings-Lee County	30,081	11,991	96%	8	94%	2,920	96%
Population	10,000 to 25,000	Comanche	Comanche	Comanche County-City	17,157	3,671	96%	15	94%	5,400	96%
Population	10,000 to 25,000	Leon	Leon	Leon County-Texwi				0		0	96%
Population	10,000 to 25,000										

Application of Ideal System Criteria - Aviation Activity Measures

Criteria Used	Population Category	MSA/PHMSA/COUNTY	Name	Airport	Duval/Freer	Population within 25-Mile Radius	5,356	Cumulative Population Coverage	98%	Percent of State Population	94%	1996 Based Aircraft Operations	1,400	Percent of State Operations
Population 10,000 to 25,000	Duval	Morris	Greater Morris County		50,032	20,419	98%	0	94%	300	96%			
Population 10,000 to 25,000	Morris	Morris	Terry	Terry County	16,518	15,688	98%	17	94%	11,000	96%			
Population 10,000 to 25,000	Ward	Roy Hurd Memorial			15,609	11,116	98%	9	94%	2,700	96%			
Population 10,000 to 25,000	Llano	Llano Municipal			11,493	11,493	98%	24	94%	7,200	96%			
Population 10,000 to 25,000	Trinity	Groveton-Trinity County			18,935	12,539	98%	0	94%	100	96%			
Population 10,000 to 25,000	Callahan	Callahan					98%		94%		96%			
Population 10,000 to 25,000	Madison	Madisonville Municipal			20,388	10,354	97%	3	94%	900	96%			
Population 10,000 to 25,000	Zavala	Crystal City Municipal			16,312	16,123	97%	2	94%	200	96%			
Population 10,000 to 25,000	Runnels	Bruce Field			11,946	12,330	97%	3	94%	7,250	96%			
Population 10,000 to 25,000	Runnels	Runnels			11,519	11,519	97%	8	94%	2,400	96%			
Population 10,000 to 25,000	Camp	Camp					97%		94%		96%			
Population 10,000 to 25,000	Sabine	Pineyola Municipal			13,231	2,802	97%	2	94%	1,100	96%			
Population 10,000 to 25,000	Dimmit	Dimmit County			18,858	3,678	97%	6	94%	3,000	96%			
Population 10,000 to 25,000	Zapata	Zapata County			10,662	10,662	97%	8	95%	2,676	96%			
Population 10,000 to 25,000	Clay	Clay					97%		95%		96%			
Population 10,000 to 25,000	Live Oak	Live Oak County			9,911	9,911	97%	2	95%	830	96%			
Population 10,000 to 25,000	Marion	Cypress River			46,757	6,466	97%	0	95%	300	96%			
Population 10,000 to 25,000	Parmer	Parmer			24,322	7,604	97%	5	95%	7,900	96%			
Ret. Sales BELOW 10,000	Brewster	Alpine-Castenas Municipal			10,727	91%	30	95%	96%	3,350	96%			
Ret. Sales BELOW 10,000	Brewster	Lajitas			3,369	3,369	97%	0	95%	100	96%			
Ret. Sales BELOW 10,000	Ochiltree	Perryton Ochiltree County			9,367	9,367	97%	22	95%	6,600	97%			
Ret. Sales BELOW 10,000	Stephens	Stephens County			10,341	9,102	97%	53	95%	15,800	97%			
Ret. Sales BELOW 10,000	Haskell	Haskell Municipal			11,109	2,384	97%	7	96%	7,600	97%			
Ret. Sales BELOW 10,000	Hemphill	Hemphill County			4,156	4,013	97%	9	96%	7,800	97%			
Ret. Sales BELOW 10,000	Childress	Childress Municipal			7,438	7,438	97%	8	96%	3,892	97%			
Ret. Sales BELOW 10,000	Bailey	Muleshoe Municipal			13,038	12,384	97%	8	96%	2,700	97%			
Ret. Sales BELOW 10,000	Dallam	Dallam					97%	9	96%	4,500	97%			
Ret. Sales BELOW 10,000	McCulloch	Curtis Field			8,468	8,468	91%	9	96%	3,900	97%			
Ret. Sales BELOW 10,000	Castro	Dimmit Municipal			8,835	6,988	97%	8	96%	11,200	97%			
Ret. Sales BELOW 10,000	Coleman	Coleman Municipal			9,112	9,112	97%	26	96%	7,800	97%			
Ret. Sales BELOW 10,000	Crosby	Crosby			12,864	2,963	97%	6	96%	4,700	97%			
Ret. Sales BELOW 10,000	Yoakum	Yoakum County			11,519	11,206	97%	9	96%	4,500	97%			
Ret. Sales BELOW 10,000	Franklin	Franklin County			19,518	4,823	97%	16	96%	6,700	97%			
Ret. Sales BELOW 10,000	Swisher	City of Tula/Swisher County Municipal			11,291	10,324	97%	19	97%	18,500	98%			
Ret. Sales BELOW 10,000	Brooks	Brooks County			13,787	7,578	97%	3	97%	4,100	98%			
Ret. Sales BELOW 10,000	Refugio	Refugio			24,907	4,292	98%	16	97%	4,500	98%			

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Criteria Used	Population Category	MSA/MSA+County	NAME	Airport	Population within 25-Mile Radius	Cumulative Population Coverage	Percent of State Population	1996 Based Aircraft	Percent of State Aircraft Based Aircraft	1996 Aircraft Operations	Percent of State Operations
Ret. Sales	BELOW 10,000	Kimble	Kimble County	Floydada Municipal	4,078	4,078	98%	12	97%	5,800	98%
Ret. Sales	BELOW 10,000	Floyd	Hamilton	Hamilton Municipal	7,680	5,070	98%	23	97%	10,800	98%
Ret. Sales	BELOW 10,000	Hamilton	San Augustine	San Augustine County	12,512	7,844	98%	16	97%	4,038	98%
Ret. Sales	BELOW 10,000	San Augustine	Mitchell	Colorado City	12,570	2,576	98%	0	97%	200	98%
Ret. Sales	BELOW 10,000	Mitchell	Culberson	Culberson County	25,680	7,046	98%	5	97%	3,500	98%
Ret. Sales	BELOW 10,000	Culberson	Martin	Stanton Municipal	2,920	2,920	98%	1	97%	2,500	98%
Ret. Sales	BELOW 10,000	Martin	Winkler	Winkler County	6,815	1,245	98%	7	97%	2,000	98%
Ret. Sales	BELOW 10,000	Winkler	Jim Hogg	Jim Hogg County	8,978	8,978	98%	7	97%	6,000	98%
Ret. Sales	BELOW 10,000	Jim Hogg	Wheeler	Shamrock Municipal	5,577	5,577	98%	0	97%	3,170	98%
Ret. Sales	BELOW 10,000	Wheeler	Wheeler	Wheeler Municipal	4,862	4,231	98%	1	97%	480	98%
Ret. Sales	BELOW 10,000	Wheeler			6,057	6,057	98%	2	97%	500	98%
Oil & Gas	BELOW 10,000	Crane	Crane County		6,781	6,781	98%	3	97%	1,200	98%
Oil & Gas	BELOW 10,000	Kent	Kent County		1,088	1,088	98%	2	97%	600	98%
Oil & Gas	BELOW 10,000	Upton	Upton County		7,353	92	98%	5	97%	2,000	98%
Oil & Gas	BELOW 10,000	Crockett	Crockett		3,984	3,984	98%	25	98%	7,575	98%
Oil & Gas	BELOW 10,000	LipscOMB	Ozona Municipal		2,380	301	98%	5	98%	2,500	93%
Oil & Gas	BELOW 10,000	Carson	Panhandle-Carson County		4,246	4,089	98%	7	98%	2,200	93%
Oil & Gas	BELOW 10,000	Reagan	Reagan County		6,363	6,363	98%	3	98%	1,800	98%
Oil & Gas	BELOW 10,000	Sutton	Sonora Municipal		6,363	6,363	98%	3	98%	980	99%
Oil & Gas	BELOW 10,000	Glasscock	Glasscock		5,264	5,264	98%	13	98%	3,000	99%
Oil & Gas	BELOW 10,000	Garza	Post-Garza County Municipal		5,264	5,264	98%	13	98%	980	99%
Oil & Gas	BELOW 10,000	Borden	Borden		4,372	3,454	98%	12	98%	5,500	99%
Oil & Gas	BELOW 10,000	Cochran	Cochran County		2,240	1,227	98%	1	98%	100	99%
Oil & Gas	BELOW 10,000	LipscOMB	Floyd/LipscOMB County		1,183	98%	1	98%	100	99%	
Oil & Gas	BELOW 10,000	LipscOMB	Higgins-LipscOMB County		2,941	2,941	98%	5	98%	5,000	99%
Oil & Gas	BELOW 10,000	Sherman	Sherman		5,146	3,381	98%	7	98%	2,100	99%
Oil & Gas	BELOW 10,000	McMullen	Stratford Field(new)		5,960	5,960	98%	9	98%	2,800	99%
Oil & Gas	BELOW 10,000	Terrell	Terrell		1,547	52	98%	0	98%	1,150	99%
Oil & Gas	BELOW 10,000	Irion	Irion		6,133	6,133	98%	28	98%	980	99%
Oil & Gas	BELOW 10,000	King	Gruver Municipal		6,126	5,06	98%	3	99%	900	99%
Oil & Gas	BELOW 10,000	Hansford	Hansford		1,353	1,353	98%	5	98%	1,000	99%
Oil & Gas	BELOW 10,000	Spearman	Spearman Municipal		1,652	1,652	98%	0	98%	400	99%
Oil & Gas	BELOW 10,000	Sterling	Sterling		2,974	2,974	98%	4	99%	1,200	99%
Oil & Gas	BELOW 10,000	Roberts	Miami-Roberts County		4,568	3,14	98%	8	99%	2,900	99%
Oil & Gas	BELOW 10,000	Kenedy	Kenedy		8,967	8,967	98%	41	99%	20,150	99%
Agriculture	BELOW 10,000	Hardeman	Quanah Municipal		10,660	10,660	98%	3	99%	1,500	99%
Agriculture	BELOW 10,000	Loving	Loving		6,948	1,465	98%	3	99%	980	99%
Agriculture	BELOW 10,000	Jack	Jacksboro Municipal		1,081	1,081	98%	5	98%	1,000	99%
Agriculture	BELOW 10,000	Stonewall	Stonewall County		1,652	1,652	98%	0	98%	400	99%
Agriculture	BELOW 10,000	Coke	Robert Lee		2,974	2,974	98%	4	99%	1,200	99%
Agriculture	BELOW 10,000	Goliad	Goliad		4,568	3,14	98%	8	99%	2,900	99%
Agriculture	BELOW 10,000	Schleicher	Eldorado		8,967	8,967	98%	5	99%	1,200	99%
Agriculture	BELOW 10,000	Edwards	Edwards County		2,503	2,503	98%	2	99%	2,320	99%
Agriculture	BELOW 10,000	Throckmorton	Throckmorton		5,133	5,133	98%	28	98%	980	99%
Agriculture	BELOW 10,000	Hartley	Hartley		10,660	10,660	98%	41	99%	20,150	99%
Agriculture	BELOW 10,000	Lynn	T-bar		1,465	1,465	98%	3	99%	1,500	99%
Agriculture	BELOW 10,000	Armstrong	Armstrong		18,061	543	98%	11	99%	6,700	99%
Agriculture	BELOW 10,000	Fisher	Fisher County		3,089	2,097	98%	9	99%	4,500	99%
Agriculture	BELOW 10,000	Oldham	Oldham County		8,967	8,967	98%	8	99%	2,900	99%
Agriculture	BELOW 10,000	Hall	Memphis Municipal		8,967	8,967	98%	5	99%	1,200	99%
Agriculture	BELOW 10,000	San Saba	San Saba County Municipal		995	2,333	98%	4	99%	5,600	100%
Agriculture	BELOW 10,000	HudsPeth	Dell City Municipal		1,338	1,338	98%	0	99%	0	100%
Agriculture	BELOW 10,000	Concho	Eden-Concho County(new)		56,371	56,371	98%	0	99%	0	100%
Agriculture	BELOW 10,000	Rains	Rains County		985	985	98%	99%			

Application of Ideal System Criteria - Aviation Activity Measures

Criteria Used	Population Category	MSA/MSA-County	NAME	Airport	Population within 25-Mile Radius		Cumulative Population Coverage		Percent of State Population		1996 Aircraft Operations		Percent of State Operations
					4,883	4,883	98%	98%	11	99%	9,000	100%	
Agriculture	BELOW 10,000	Baylor	Seymour Municipal		4,905	3,211	98%	98%	3	99%	1,200	100%	
Agriculture	BELOW 10,000	Mason	Mason County		8,318	3,161	98%	98%	9	99%	500	100%	
Agriculture	BELOW 10,000	Knox	Knox City Municipal		8,897	98%	98%	98%	5	99%	2,000	100%	
Agriculture	BELOW 10,000	Knox	Munday Municipal		2,678	1,651	98%	98%	1	99%	300	100%	
Agriculture	BELOW 10,000	Dickens	Spur Municipal										
Agriculture	BELOW 10,000	Dickens											
Presidio	BELOW 10,000	Fredericksburg	Fredericksburg		4,071	3,946	98%	98%	19	100%	6,000	100%	
Presidio	BELOW 10,000	Fredericksburg	Maria Municipal		3,766	98%	98%	98%	3	100%	1,200	100%	
Presidio	BELOW 10,000	Fredericksburg	Presidio Lely International		3,677	2,650	98%	98%	8	100%	2,400	100%	
Donley	BELOW 10,000	Clarendon	Clarendon Municipal										
Briscoe	BELOW 10,000	Briscoe											
Shackelford	BELOW 10,000	Shackelford	Albany Municipal		9,767	2,854	98%	98%	6	100%	2,200	100%	
Cottle	BELOW 10,000	Cottle	Dan E. Richards Municipal		2,242	2,153	98%	98%	5	100%	1,500	100%	
Collingsworth	BELOW 10,000	Collingsworth	Marian Airpark										
Motley	BELOW 10,000	Motley											
Jeff Davis	BELOW 10,000	Jeff Davis											
Menard	BELOW 10,000	Menard	Menard County		4,229	4,229	98%	98%	1	100%	900	100%	
Blanco	BELOW 10,000	Blanco											
Foard	BELOW 10,000	Foard	Foard County		5,669	1,595	98%	98%	0	100%	500	100%	
Real	BELOW 10,000	Real	Reel County										
Delta	BELOW 10,000	Delta											
La Salle	BELOW 10,000	La Salle	Cotulla-La Salle County		7,658	1,548	98%	98%	9	100%	7,900	100%	
Somervell	BELOW 10,000	Somervell											
Kinney	BELOW 10,000	Kinney											
Mills	BELOW 10,000	Mills	Mills County (New)								0	100%	
		TOTAL			18,815,666	98%	11,880	100%			8,271,458	100%	



**Appendix D**  
**Data Sources for Criteria Used in the Optimization Analysis**



## **Data Sources for Criteria Used in the Optimization Analysis**

Based aircraft 1996	Based on data collected by FAA on individual state (FAA Form 5010)
Total number of operations 1996	Based on data collected by FAA on individual state (FAA Form 5010)
Population served by the airport	Estimate based on incorporated cities within 25 miles of an Airport and percentage of the unincorporated area within this radius
County assessed property value	Annual Property Tax Report , Tax Year 1996, John Sharp, Comptroller of Public Accounts
County Population July 1, 1996	Most current population data from the Texas State Data Center
Agricultural Net Cash Return	U.S. Department of Commerce, Census of Agriculture, 1992. (Latest available)
Minerals-Oil & Gas Property Tax By County	Comptroller of Public Accounts, 1996
Retail Sales by County	Comptroller of Public Accounts, 1997
Total Employment by County	Texas Workforce Commission, 1997

